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ANNUAL REPORT

of the

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF SAN FRANCISCO

FISCAL YEAR ENDING JUNE 30, 1959

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ANNUAL REPORT

# of the

DEPARTMENT OF PUBLIC WORKS

CITY AND COUNTY OF SAN FRANCISCO

FISCAL YEAR ENDING JUNE 30, 1959

GEORGE CHRISTOPHER	Mayor
SHERMAN P. DUCKEL	Chief Administrative Officer
REUBEN H. OWENS	Director of Public Works

R
SS

SHERMAN P. DUCKEL
Chief Administrative Officer
City and County of San Francisco

R 352.5 S194a 1958/59

Table of Contents

DIRECTOR'S LETTER OF TRANSMITTAL 5

DEPARTMENT OF PUBLIC WORKS 6

BUREAU OF ENGINEERING 9
- General Review 9
- Freeway Program 11
- Street and Highway Improvements 14
- Street Improvements Financed by Property Owners 23
- Street Dedications and Changes 24
- Surveys and Mapping 29
- Street and Sidewalk Inspection 31
- Landslide Correction 33
- Traffic Engineering 37
- Sewerage System 46
- Landscaping 63
- Garbage Disposal 64
- Laboratory and Testing 69

BUREAU OF ARCHITECTURE 74

BUREAU OF BUILDING INSPECTION 97

MAINTENANCE AND OPERATION 111
- BUREAU OF SEWER REPAIR AND SEWAGE TREATMENT.... 123
- BUREAU OF STREET REPAIR 146
- BUREAU OF STREET CLEANING 163
- BUREAU OF BUILDING REPAIR 174

ADMINISTRATIVE BUREAUS 184
- BUREAU OF ACCOUNTS 184
- CENTRAL PERMIT BUREAU 189

APPENDICES

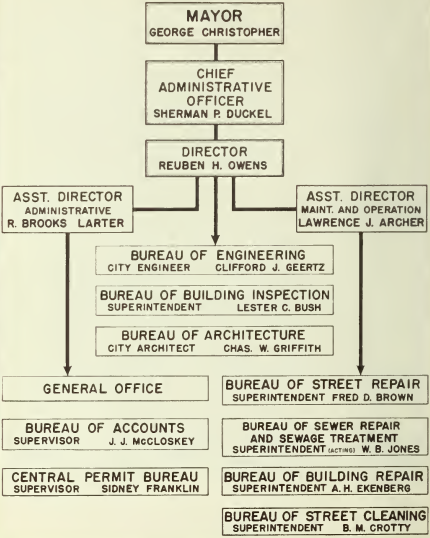
I - Current Contract Data, Bureau of Engineering

II - Current Contract Data, Bureau of Architecture

ORGANIZATION CHART

DEPARTMENT OF PUBLIC WORKS

CITY AND COUNTY OF SAN FRANCISCO
JUNE 30, 1959


MAYOR
GEORGE CHRISTOPHER
CHIEF ADMINISTRATIVE OFFICER
SHERMAN P. DUCKEL
DIRECTOR
REUBEN H. OWENS
ASST. DIRECTOR
ADMINISTRATIVE
R. BROOKS LARTER
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BUREAU OF ARCHITECTURE
CITY ARCHITECT CHAS. W. GRIFFITH
GENERAL OFFICE
BUREAU OF ACCOUNTS
SUPERVISOR J. J. McCLOSKEY
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BUREAU OF STREET REPAIR
SUPERINTENDENT FRED D. BROWN
BUREAU OF SEWER REPAIR AND SEWAGE TREATMENT
SUPERINTENDENT (ACTING) W. B. JONES
BUREAU OF BUILDING REPAIR
SUPERINTENDENT A. H. EKENBERG
BUREAU OF STREET CLEANING
SUPERINTENDENT B. M. CROTTY

CITY AND COUNTY OF SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS

OFFICE OF THE
DIRECTOR OF PUBLIC WORKS

260 CITY HALL
SAN FRANCISCO 2,
CALIFORNIA

May 10, 1960

Annual Report
1958-1959

Mr. Sherman P. Duckel
Chief Administrative Officer
City and County of San Francisco

Dear Mr. Duckel:

In compliance with the provisions of Section 20 of the Charter of the City and County of San Francisco, I submit herewith the annual report of the Department of Public Works for the fiscal year ending on June 30, 1959.

During the year the Department awarded 243 contracts for the total bid amount of $26,122,639, an increase of 28% in the number of contracts awarded and an increase of 106% in the value of awards.

There were 11,614 building permits issued for work estimated to cost $92,217,822, which amount tops by $14 million the previous high established in 1950.

The successful operation of the Department is due to the untiring efforts of the Assistant Directors, the Heads of the nine Department Bureaus, and to their respective staffs, and my sincere thanks go to them for jobs well and efficiently done.

I would like to take this opportunity to thank you, Mr. Duckel, for the assistance and guidance given me since my appointment as Director of this Department.

Respectfully,

Reuben H. Owens

Reuben H. Owens
Director of Public Works

DEPARTMENT OF PUBLIC WORKS

The following activities were Department-wide in nature or were accomplished by the General Office staff.

SAFETY PROGRAM

Department personnel suffered a total of 127 lost-time injuries as compared with 88 during the 1957-1958 fiscal year, an increase of 44%. The cost to the City of these injuries, which includes compensation pay, sick-leave pay and medical-hospital costs, was $49,416 as compared with $43,605 for the previous year, an increase of 13%, of which about 5% is attributed to an increase in the cost of wages and materials. Therefore, the 8% increase in cost of injuries compared to the 44% increase in number of lost-time injuries would indicate that the severity of the injuries has been materially reduced.

The injury record for each Bureau for the year is as follows:

	INJURIES			
BUREAU	LOST TIME	NO LOST TIME	TOTAL	FREQUENCY RATE* 1958-1959
Architecture	3	1	4	25
Building Inspection	0	5	5	0
Building Repair	40	32	72	52
Engineering	5	10	15	10
Sewer Repair and Sewage Treatment	24	23	47	51
Street Cleaning	38	38	76	55
Street Repair	17	15	32	49
Department	127	124	251	41

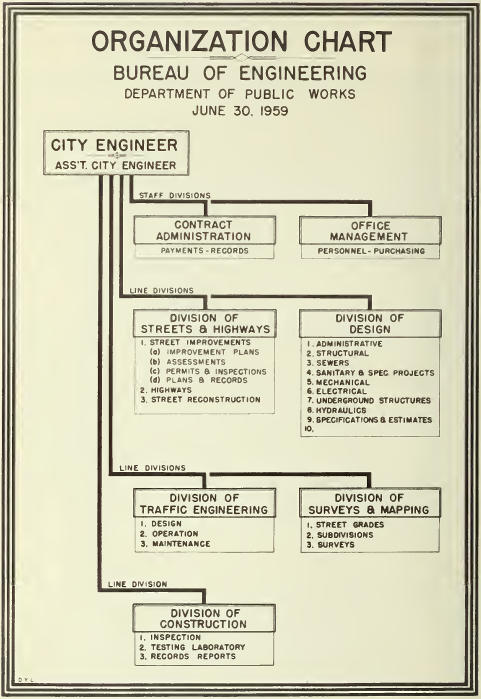
*Frequency Rate is the number of lost-time injuries per million man-hours worked.

MISCELLANEOUS

1. This Department has the responsibility of preparing estimates of the costs of Capital Improvement Projects for thirty-seven City Departments or Agencies. Cost estimates were prepared for 111 projects whose aggregate cost amounted to $7,438,501. Of these there were approved 13 projects whose total costs amounted to $396,350. These projects are exclusive of those financed by the various Bond issues as reported in the Bureaus of Architecture and Engineering.

2. Over 200 State Assembly and Senate Bills proposed by the State Legislature relating to Vehicle Code, Streets and Highway Code, Public Health and Safety Code, Housing Code, and others, were reviewed and reports as to suggested City recommended action were transmitted to the Chief Administrative Officer.

3. The employees of the Department contributed $12,167 to the United Bay Area Crusade, an increase of 27% over the previous year.



ORGANIZATION CHART

BUREAU OF ENGINEERING

DEPARTMENT OF PUBLIC WORKS

JUNE 30, 1959

BUREAU OF ENGINEERING

Clifford J. Geertz, City Engineer

GENERAL REVIEW OF THE YEAR'S WORK

The Bureau of Engineering performed its usual functions throughout the year consisting principally of general engineering services, planning and supervision of construction contracts.

In general the work of the Bureau continued at the same general level as during the preceding year. However, as the year wore on and it appeared that the Giants would be in contention for the National League Pennant, the pace on the projects connected with the new ball park was stepped up to make certain that the work would be completed by the end of the current baseball season.

The total value of contracts awarded was a little more than half the value of those awarded last year although the number of contracts increased from 107 to 123. Contract payments made during the year, however, amounted to about $6,200,000, an increase of more than $750,000 over last year.

SUMMARY OF CONTRACTS

Table I summarizes the contracts which were awarded or under way during the fiscal year under plans and specifications prepared by the Bureau. This summary is supplemented by separate tables in Appendix I which list all the contracts for each of the various types of construction. Table I also indicates the estimated amount expended during the year on contracts under way, some of which had been awarded during the preceding year but not completed until the current year.

The figures for contracts awarded and amounts expended are shown graphically in Figure 1 for a ten year period.

TABLE I
BUREAU OF ENGINEERING CURRENT CONTRACT DATA SUMMARY
Showing All Contract Work Awarded or Under Way
July 1, 1958—June 30, 1959

Table	Type of Construction	No.	Contracts Awarded Aggregate Value	Amount Expended Fiscal Year 1958-59
A	Major Thoroughfares	3	$ 315,830.75	$3,062,085.60
B-1	Streets—Private Contracts	35	423,990.00	448,582.00
B-2	Streets—Assessment Proceedings	17	572,473.14	465,890.52
B-3	Streets—Public Contract City Pay	14	587,920.18	589,248.41
B-4	Streets—Car Track Removal	2	405,757.75	23,325.38
C	Traffic Signals and Channelization	3	95,840.65	30,685.15
D-1	Sewers—Pipe Vitrified Clay and Concrete	5	241,328.64	537,534.62
D-2	Sewers—Concrete, Monolithic	3	710,142.26	510,802.87
E	Miscellaneous	41	473,406.75	535,231.39
	TOTALS	123	$3,826,690.12	$6,203,385.94

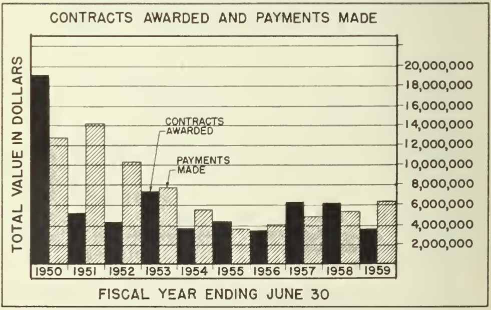


FIG. 1
CONTRACTS AWARDED AND PAYMENTS MADE

FREEWAY PROGRAM

Two separate actions, one by the Board of Supervisors and the other by the State Legislature, have considerably changed the outlook of the freeway program for San Francisco.

By adopting Resolution No. 45-59 at its meeting of January 26, 1959 the Board of Supervisors declared official opposition to the construction of certain freeways along the routes as outlined in the Master Trafficways Plan. The Resolution, however, excepted opposition to the construction of the Hunters Point Freeway, the Southern Freeway from Orizaba Avenue to the county line, and the Embarcadero Freeway.

The opposed routes named in the Resolution are the Western Freeway, the Junipero Serra Freeway, the Park-Presidio Freeway, the Central Freeway from Turk Street to its connection with the Golden Gate Freeway, the Golden Gate Freeway from The Embarcadero and Bay Street to the Golden Gate Bridge, the Mission Freeway from Thirteenth Street to its connection with the Southern Freeway, and the Crosstown Freeway.

Subsequently, at the close of its regular session in 1959, the State Legislature enacted legislation to embrace the routes of three freeways presently under City jurisdiction - the Hunters Point Freeway, the Southern Freeway between James Lick Memorial Freeway and a temporary terminus in the vicinity of Twenty-Third Street and Tennessee Street, and the Embarcadero Freeway - into State Route 253 which will become part of the State Highway System on September 19, 1959.

CITY FREEWAYS

Southern Freeway

Under a contract awarded by the State Director of Public Works construction is progressing rapidly on the James Lick Memorial Freeway - Southern Freeway Interchange in which is included the first construction work on the City's section of the Southern Freeway. Scheduled completion date for the interchange is April 1960.

Final plans and specifications for the remainder of the City's project are nearly completed by the firm of DeLeuw, Cather and Company, Consulting Engineers. They will reflect the changes from the preliminary plans that were necessitated by the demise of the Army Street Southern Crossing.

The Real Estate Department has acquired a substantial portion of the total number of properties required by the City's Southern Freeway right-of-way. Provided sufficient funds are available, the acquisition of the remaining portion is in sight within a year.

Crosstown Freeway

Two separate public hearings were held on October 16, 1958 on the preliminary report and plans for the Crosstown Freeway as submitted to the Director of Public Works by the firm of De Leuw, Cather and Company, Consulting Engineers. At these hearings considerable objection was raised against the proposed selection of an elevated type freeway structure through the Glen Park district. Consequently, a study was begun to resolve these objections but the study was abruptly halted when, on February 19, 1959, the Board of Supervisors repealed appropriations previously made for the Crosstown Freeway.

STATE FREEWAYS

Because of Resolution No. 45-59 the preliminary planning program of the State Division of Highways for freeways in San Francisco has become dormant. Until State Route 253 becomes active, the construction of the Southern Freeway, from James Lick Memorial Freeway to Orizaba Avenue, is the only State activity in San Francisco.

Embarcadero Freeway

The last section of the Embarcadero Freeway for which a routing has been adopted, 1.2 miles in length, was completed and opened to traffic in February 1959. This formed a much needed freeway link between Broadway and Sansome Street and the San Francisco-Oakland Bay Bridge as well as the Skyway.

Central Freeway

The Central Freeway, from Thirteenth Street and Mission Street to Golden Gate Avenue and Franklin Street, was put in operation on April 22, 1959. Thus, 1.4 miles was added to the constructed freeway system in San Francisco, extending its service to the Civic Center area.

Southern Freeway

The Construction of the interchange between the James Lick Memorial Freeway and the City's portion of the Southern Freeway is presently in progress under the first of four contracts covering the construction of the entire Southern Freeway project.

The design of the Southern Freeway and the relocation of Alemany Boulevard from the interchange westerly to Mission Street has been reviewed and approved by the City Department of Public Works. The section from Mission Street to Balboa Park is now being reviewed by the City.

Western Freeway

Wilbur Smith and Associates, Consulting Engineers, presented a report on the second and final phase of their studies for the Western Freeway on September 10, 1958 to the Director of Public Works. This report compared four alternate routes for a Western Freeway on the bases of traffic services, projects costs, economic factors and sociological and aesthetic factors. The route recommended by the report was a modification of that contained in the Master Trafficways Plan.

The first phase of the report, presented a year earlier, had concluded that a properly located Western Freeway would be needed within the next ten years. However, despite the conclusiveness of both phases of the report, hostility to the planning and construction of the Western Freeway was so great that this freeway route was specifically opposed by the board of Supervisors in their resolution No. 45-59.

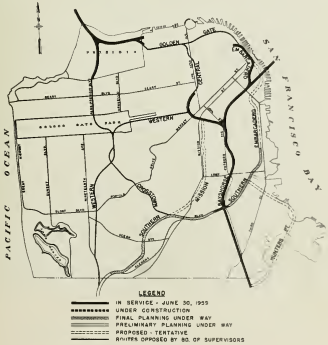


FIG. 2
PLAN OF FREEWAY SYSTEM

STREET AND HIGHWAY IMPROVEMENTS

MAJOR THOROUGHFARES

Clarendon Avenue Widening

The contract for the widening and improvement of Clarendon Avenue between Stanyan Street and Laguna Honda Boulevard was awarded on October 3, 1958. At the close of the 1958-59 fiscal year, the construction for this project was about 80% complete. The plans called for the transformation of 0.86 miles of the present two-lane undivided, unlighted street into a four-lane divided, lighted and channelized roadway.

CANDLESTICK PARK ACCESS ROADS

After it was determined, late in 1957, that a 42,000 seat baseball stadium with a 9,000-car parking lot was to be built at Candlestick Point, studies were started to develop a system of roads that would efficiently handle the large volumes of traffic that would be attracted to the stadium by ball games and other events.

The immediate are in which the stadium was to be constructed possessed only one improved street, Gilman Avenue, that could carry vehicles to the stadium site. In order to make the stadium attractive to the people, the length of time required by a motorist to exit from the area was held to be a prime design criterion. The design time was, therefore, set as approximately one hour; that is, all traffic from the stadium would be out of the parking lot and past the critical points of congestion and well on its way home approximately one hour after a week-day, capacity-attended ball game had ended. It was then determined that a minimum of eleven lanes for passenger-car traffic leaving the stadium site would be needed to satisfy this criterion.

Gilman Avenue, operating as a one-way street, would provide only four of these lanes. After studying the possible additional streets that could be provided and the relative costs, the final trafficways plan, as shown in Figure 3, was developed. It required the extensions of Ingerson Avenue, Gilman Avenue, and Jamestown Avenue; the construction of a new access road from the south and of a segment of the future Hunters Point Expressway; and, in addition, the widening of several existing streets in the area, the improvement of unimproved streets, and the modification of several traffic signals.

As it was apparent that thousands of people will use mass transit to attend the games, special roads and lanes were designated for the exclusive use of buses and taxicabs. By segregating these vehicles, they will move more efficiently and in turn, allow passenger cars to operate more freely on the other roads in the system. The only street that can be utilized effectively for the exclusive use of buses and taxicabs is Ingerson Avenue. The buses and cabs will be carried over the active slide which crosses this street, on a viaduct of substantial proportions. Two lanes on Jamestown Avenue will be reserved for buses and taxicabs only.

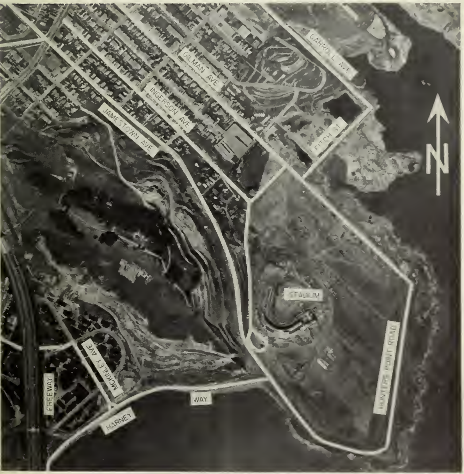


FIG. 3
CANDLESTICK PARK TRAFFICWAYS PLAN

Since the stadium and parking lot was to be designed and constructed by a private non-profit corporation it was found necessary to coordinate the City's work with that of the stadium contractor. As 1957 ended, the Bureau of Engineering had concentrated a major portion of its staff on the various aspects of the Access Roads project. Weekly conferences of Bureau Section Heads were held to apprise those concerned of the progress and immediate target dates, and to provide for rapid interchange of information and design data.

The project was divided into seventeen component contracts. Some of these were street improvement jobs that would require extended time due to assessment procedure requirements. The assessment jobs were designed in the early stage and proceedings started as soon as possible. Plans for those jobs that required changes in sidewalk width had to be similarly completed in the early stage because of the need for public hearings and approval of the Board of Supervisors. By the end of the fiscal year work was under way on twelve contracts, one other had been awarded but not yet started, and a call for bids on the remaining four contracts had been issued.

The Jamestown Avenue grading contract was the largest single contract and also the most important. It called for grading the Jamestown Avenue Extension by excavating approximately 1,350,000 cubic yards of material from the east and north slopes of Candlestick Point and for this material to be deposited on the nearby tidelands to provide embankment for the construction of the Gilman Avenue Extension, the South Access Road, the easterly portion of the Jamestown Avenue Extension, the Hunters Point Expressway, and the West Service Road. Since subsequent contracts for paving these roadways, constructing sewers therein, etc., would have to wait the completion of the grading contract, its importance was preeminent.

From the first month of the City's activity on the project, all the utility agencies were kept informed of the work which was being contemplated. In September 1957, a general meeting with the representatives of these agencies was held and the road system discussed. As planning was finalized. subsequent meetings were held and a continuous stream of plans sent to all concerned. The sequence of work was submitted to the utility agencies to enable them to gear their activities with those of the City. As Detailed plans were made available, preliminary prints were sent to each agency. Schedule and project revisions were similarly forwarded to them and constant liaison was maintained to assure a smooth co-ordination of their work with that of the contractors.

Discussions were held with bus, taxicab, and Municipal Railway representatives, the first being in December 1957. Valuable traffic data involving mass transit vehicular operations were obtained and utilized in our design of the trafficways system.

On-the-spot studies of traffic handling at large-attendance activities, such as events at the Cow Palace and the horse races, were made for ideas as to character and volume of the various types of vehicles attending such events.

Most of the new roads are constructed on filled tidelands. The maximum depth of water is about 20 feet underlaid by Bay mud to a varying depth. As this fill was deposited very rapidly and the roads constructed thereon shortly thereafter, little if any compaction could be achieved prior to roadway construction. Estimates of probable consolidation of the underlying mud indicated approximately one foot of settlement during the first year.

It was estimated that about six months would intervene between deposition of fill and roadway construction. The fill was therefore constructed six inches above final grade of the area so that, when the roadways were paved, the entire area would be at design grades and any future settlements would affect the system as a whole and only differential variations of large magnitude would require extensive maintenance. After the fill was deposited, sewers on piling were constructed in Fitch Street and Gilman Avenue Extension.

All roadways on fill were constructed with their surface on a tilted plane, the high side being toward the water. This allows for considerable settlement of the area before wave action of the Bay waters will require restoring the roadways to grade. Furthermore, the sewers on piles are located near the outer edge of the fill to reinforce the "dike" effect of this part of the fill and thereby extend the maintenance-free life of the pavement.

The cost of the road system is estimated at 2.8 million dollars and the sewers and drainage facilities at 1.5 million dollars. Besides serving the stadium, the roads and sewers will serve the industrial area which, without doubt, will develop as the adjacent tidelands are reclaimed.

Although time is short and all loose ends may not be gathered up, both the stadium and the road system will be available for use should the Giants prevail upon their opponents to co-operate in bringing the next World's Series to San Francisco.

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OTHER PROJECTS

Log Cabin Ranch Road

In the spring of 1952, a resurfacing project was completed on approximately 6,000 feet of the access road between Log Cabin Ranch School for Boys and the Alpine Creek Road in San Mateo County. During the intervening years the road had fallen into disrepair due to insufficient maintenance and an increased volume of traffic.

As a corrective measure, a section of the access road was widened and resurfaced under a contract awarded July 30, 1959. For lack of sufficient funds, only approximately 2,600 feet of the road extending from its junction with Alpine Creek Road was improved.

LOG CABIN RANCH ROAD BEFORE RECONSTRUCTION

LOG CABIN RANCH ROAD AFTER RECONSTRUCTION

County Jail Road

Under a contract awarded April 17, 1959, the paved roads within the grounds of San Francisco County Jail No. 2, located in San Mateo County, were resurfaced. This step in preventive maintenance will extend by years the useful life of the paved roads.

Bernal Heights Guard Railing

Weathering had shown its effect on the wood fence erected many years ago along the outer berm of Bernal Heights Boulevard, rendering the fence unsightly and ineffective as a traffic barrier. A contract was let on September 10, 1958 under which the wood fence was replaced by metal guard railing.

Painted completely in white, the metal guard railing not only visually projects itself to passing motorists but also lends itself quite well to the surrounding landscape.

PLANS FOR FUTURE WORK

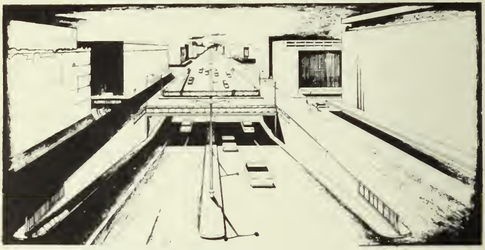
Mansell Street Widening

Plans are now completed for the widening of Mansell Street between San Bruno Avenue and University Street. When widened, the street will accommodate two traffic lanes in each direction with a wide, landscaped median strip. A small portion of the work will be financed by owners of abutting property and will be started when final assessment proceedings are completed.

Geary Expressway

The widening and reconstruction of Geary Street between Franklin Street and Broderick Street into Geary Expressway will be done under two separate contracts.

One contract will feature the construction of a grade separation structure at Fillmore Street which is described in another section of this report and the other contract will cover the bulk of the remaining reconstruction work.



GEARY EXPRESSWAY UNDERPASS AT FILLMORE STREET
Perspective Looking West

Webster Street Widening

The widening of Webster Street between Post Street and Golden Gate Avenue to a four-lane divided roadway is scheduled for the latter part of 1959. The Real Estate Department is proceeding with the acquisition of the necessary right-of-way along the east side of Webster Street where the widening will take place.

This project, together with the Geary Expressway project, is an essential part of the redevelopment of the Western Addition.

Brotherhood Way

Brotherhood Way will be realigned and reconstructed from Lake Merced Boulevard to west of Junipero Serra Boulevard to eliminate a sharp summit vertical curve and short radius horizontal alignment. Formerly Stanley Drive, Brotherhood Way will have a pedestrian overpass as Thomas More Way for public convenience and safety.

McLaren Park Roads

The design of two units of the McLaren Park Roads is now being conducted in coordination with the recent McLaren Park development plans of the Recreation and Park Department.

The first unit is a section of the McLaren Parkway as contained in the Master Trafficways Plan, extending from Mansell Street at University Street to Persia Avenue and Brazil Avenue at La Grande Avenue. This will be a four-lane divided roadway with a landscaped center island.

The second unit will be a two-lane roadway extending from Visitacion Avenue at Hahn Street to McLaren Parkway just west of University Street and will replace Gilligan Drive, now removed for the construction of a golf course.

Geneva Avenue Widening

Plans are being developed to widen Geneva Avenue to a four-lane divided roadway between Alemany Boulevard and San Jose Avenue.

STREET RECONSTRUCTION

Nine contracts, aggregating $511,037 were awarded for construction reconstruction and maintenance on 20.39 miles of city streets. Two contracts totaling $256,574 were for resurfacing; two totaling $95,463 were for brick and basalt pavement replacement; five totaling $159,000 were in conjunction with the new Candlestick Park Stadium Access Road System.

The second contract was awarded for $28,104 for raising shallow curbs on steep streets in connection with runaway car prevention. The preliminary reports indicate a noticeable reduction in runaway incidents since the inauguration of the recent remedial measures.

TRACK REMOVAL

The Geary Boulevard track removal contract which was described in last year's report was completed. The removal of the track on downtown Geary Street and along the route of the "B" line in the outer Richmond District was included in two contracts awarded, totaling $405,757 and covering 2.43 miles of double track. The track removal program has, to date, accounted for the removal of tracks from 109.52 miles of city streets; 2.54 miles are now under contract and 2.41 miles of abandoned track still remain to be removed. Figure 4 shows the status of the track removal program as of June 30, 1959.

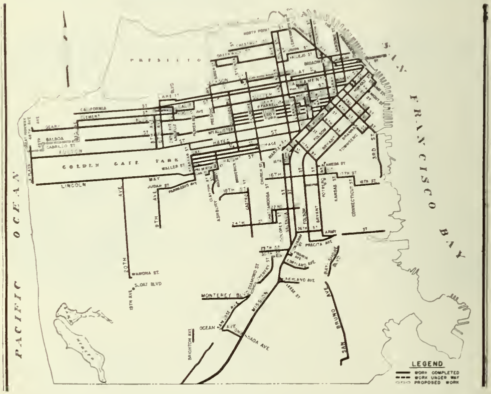


FIG. 4
TRACK REMOVAL PROGRAM

STREET IMPROVEMENTS FINANCED BY PROPERTY OWNERS

All street construction which was financed in whole or in part by the owners of fronting property and for which permits were granted or public contracts awarded during the 1958-59 fiscal year together with those authorized but not completed in the previous fiscal year, are listed in detail in Appendix 1, Tables B-1 and B-2.

PRIVATE CONTRACTS

Table B-1 lists the street improvements which were constructed under private contracts negotiated directly between the property owners and contractors of their own choice. The City's only function in private contract work is to grant the permit, furnish the plans and specifications, and inspect the work during construction. Thirty-four permits for private contracts aggregating $422,690 were issued during the year.

ASSESSMENT CONTRACTS

Table B-2 lists similar street projects which were done under public contract awarded by the City, the cost being assessed in whole or in part against the property owners benefited by the work. This procedure is in accordance with the Street Improvement Ordinance of 1934 which provides for preparation of plans and specifications, notification of property owners, public hearings, awarding of contract, supervision of construction, and final levy of assessment on the property. In many cases, City Aid is extended in order to reduce individual assessments to the legal limit which is defined as two and one-half times the lot valuation. The City also contributes funds according to established rules in order to prevent excessive assessments on residential corners, irregular lots and property having disproportionately long frontage. Although only a little more than half as many assessment contracts were awarded than last year, the total value of the contracts was almost doubled.

Table 2 indicates the volume of work carried on during the year in connection with assessment proceedings for street improvements.

TABLE II

STREET IMPROVEMENT ASSESSMENTS, ETC.

ASSESSMENTS AND BONDS FOR STREET WORK PERFORMED UNDER THE STREET IMPROVEMENT ORDINANCE OF 1934

Assessments issued for cost of street work	16
Cost of street improvements covered by assessments issued	$239,012.06
Receipts for bond payments issued	124
Amount of bond payments collected	$ 10,448.17

STREET WORK PROCEEDINGS INSTITUTED UNDER THE STREET IMPROVEMENT ORDINANCE OF 1934

Resolutions of Intention passed	17
Street Improvement Projects recommended to the Board of Supervisors	19
Notices of Street Improvement posted	323
Notices of Resolution of Intention mailed	363
Ordinances ordering performance of street improvements passed	17
Proposals for street improvements published	17
Awards of Contract for street improvements	17
Notices of Recordation posted	181
Notices of Recordation mailed	676
Private Contracts granted	34
Estimated Cost of Private Contracts granted	$422,690.00

STREET DEDICATIONS AND CHANGES

The numerous actions taken by the City during the year with reference to subdivisions, street grades, width of sidewalks and street closings were based on investigations and recommendations of the Bureau of Engineering. In many cases they involved preparation of diagrams maps, legislation and legal property descriptions by the Division of Surveys and Mapping.

SUBDIVISION MAPS

The following tentative maps were received and reported on:

Miraloma Park Subdivision No. 10; southerly slope of Mount Davidson

Forest Knolls Subdivision No. 2; westerly slope of Mount Sutro

Forest Knolls Subdivision No. 3; westerly slope of Mount Sutro

Resubdivision of a Portion of Map No. 1 of Pacific Terrace; west of Forest Hills Subdivision

Subdivision maps approved by the Department of Public Works, adopted by the Board of Supervisors as official maps and filed in the office of the Recorder were:

Midtown Terrace Subdivision No. 7; westerly slope of Twin Peaks

Miraloma Park Subdivision No. 10; southerly slope of Mount Davidson

Forest Knolls Subdivision No. 2; westerly slope of Mount Sutro

Record of Survey Maps approved by the City Engineer and filed in the office of the Recorder were:

Record of Survey Map of a Portion of Block 3028-B; southerly slope of Mount Davidson

Record of Survey Map of a Portion of Blocks 7236 and 7237 in the Lakeside District

Record of Survey Map of a Partion of Block 6458; Southern Hillsides

Record of Survey Map of Fort Mason; U.S. Military Reservation

Record of Survey Map of a Portion of 50 Vara Block 179; easterly toe of Russian Hill

STREET OPENINGS, WIDENING AND EXTENSIONS

Maps adopted as official by the Board of Supervisors, approved and recorded providing for the opening, widening or extension of streets including streets within new subdivisions were as follows:

Dellbrook Avenue	Panorama Drive to 1400' northerly	Extension
Lori Lane	Dellbrook Avenue, 130' westerly to Clarendon Avenue	Opening
Palo Alto Avenue	830' westerly to Clarendon Avenue	Extension
Lomita Avenue	At 100' southerly from Lawton Street	Widening
Hillcrest Court	Myra Way to 200' southerly	Opening
Coventry Court	Cresta Vista Drive to 340' northerly	Opening
Coventry Lane	Myra Way, 200' easterly to Coventry Court	Opening
Cresta Vista Drive	Lulu Alley, 520' easterly to Bella Vista Way	Extension
Bella Vista Way	Los Palmos Drive, 220' southerly to Stanford Heights Avenue	Extension
Sixteenth Street	Roosevelt Way to 770' easterly	Widening
Forest Knolls Drive	Oak Park Drive to 570' northerly	Extension
Woodhaven Court	Forest Knolls Drive to 400' westerly	Opening
Glenhaven Lane	Oak Park Drive to 200' westerly	Opening
Blairwood Lane	Oak Park Drive, 145' northerly to Christopher Drive	Extension
Blairwood Lane	Christopher Drive to 134' northerly	Extension
Christopher Drive	Oak Park Drive to 2625' easterly	Extension
Lake Forest Court	Oak Park Drive to 231' northerly	Opening

STREETS VACATED

The following streets were vacated between the limits noted:

Marietta Drive	100' at its easterly termination north of El Sereno Court
Boaz Court	All of same north of Lulu Alley
Lulu Alley	Cresta Vista Drive, 130' northerly to its termination
Cresta Vista Drive	Lulu Alley, 220' easterly to its termination
Bella Vista Way	Los Palmos Drive, 280' southerly to its termination
Blackwood Street	Ninth Street, 100' easterly to its termination

Unnamed Street	Foerster Street, 100' easterly to Verna Street
Fountain Street	Clipper Street to 40' northerly
Latham Place	Mason Street, 137' westerly to its termination
Dikeman Place	Mason Street, 160' westerly to its termination
Pemberton Place	Crown Terrace, 100' southerly to Twin Peaks Boulevard
Ralston Street	200' portion, 300' south of Randolph Street
Casey Drive	160' at its easterly termination
First Street	Bryant Street, 300' northerly
Rincon Street	Harrison Street, 375' southerly
Sterling Street	Harrison Street, 325' southerly
Meade Avenue	A portion at Third Street
Olmstead Street	900' between Bowdoin and Goettingen Streets
Hamilton Street	Mansell Street, 860' northerly to Dwight Street
Holyoke Street	Mansell Street, 860' northerly to Dwight Street
Somerset Street	Mansell Street, 860' northerly to Dwight Street

STREET GRADES CHANGED

Official grades were modified on the following streets:

Pine Street	Between Kearny Street and Grant Avenue
O'Farrell Street	Between Taylor Street and 204' easterly
Taylor Street	Between O'Farrell Street and 137' southerly
Ankeny Street	Between 136' west of Mill Street and Bishop Street
Somerset Street	Between Mansell Street and Ordway Street
Ordway Street	Between Goettingen Street and Somerset Street
Mill Street	Between Ankeny Street and 60' southerly
Army Street	Between Castro Street and Noe Street
Mendell Street	Between Williams Avenue and Yosemite Avenue
So. Van Ness Ave.	Between Market Street and Mission Street

Market Street	Between South Van Ness Avenue and Eleventh Street
Eleventh Street	Between Market Street and Mission Street
Mission Street	Between South Van Ness Avenue and Eleventh Street
Los Palmos Drive	Between 33' east and west of Stanford Heights Avenue
Stanford Heights Avenue	Between Los Palmos Drive and Melrose Avenue
Melrose Avenue	Between Gennessee Street and Foerster Street
Glendale Street	Between Market Street and Corbett Avenue
Raymond Avenue	Between Sawyer Street and Elliot Street
Tompkins Avenue	Between Putnam Street and Bronte Street
Bronte Street	Between Tompkins Avenue and 200' northerly

SIDEWALK WIDTHS CHANGED

Official sidewalk widths were changed on the following streets:

So. Van Ness Ave.	Between Market Street and Mission Street
Glendale Street	Between Market Street and Corbett Avenue
Mission Street	Between Fourth Street and Fifth Street

OFFICE WORK

Maps prepared by the Division of Surveys and Mapping were as follows:

Civic Center Garage	Boundary
Fire House Engine No. 14	Boundary and Topography
San Francisco Hospital—Isolation Ward	Topography
Clarendon Elementary School Site	Boundary and Topography
San Francisco Hospital—North of 22nd Street	Topography
San Francisco Hospital—Wards 10 and 20	Topography

Hall of Flowers Site—Section 2	Topography
Roosevelt Jr. High School	Boundary and Topography
Helen Wills Playground	Boundary and Topography
Lomita Avenue	Widening
Palo Alto Avenue	Extension
Sixteenth Street	Widening

Four tentative subdivision maps were examined, checked and approved. Three subdivision maps, after being checked for lot line dimensions and exterior boundaries, were approved, adopted by the Board of Supervisors and filed in the office of the Recorder. Five Record of Survey Maps were checked, approved and filed in the office of the Recorder.

More than seventy-three miscellaneous drawings were prepared in connection with property acquisition and disposition, street openings, widenings and vacations, and easement acquisitions and abandonments.

Seventeen requests from the City Attorney's Office to determine the City's interest in property involved and to check the boundary descriptions in actions to quiet title were reported on.

Eleven appeals from decisions of the City Planning Commission were checked to determine whether the signatures represented at least twenty percent of the owners within a radius of 300 feet of the property involved so as to qualify for consideration by the Board of Supervisors.

One hundred twenty-one descriptions for deeds to and from the City were checked regarding property under the jurisdiction of the Department of Public Works.

Investigations were made for the approval of twenty-one street vacations, twenty grade changes and three sidewalk width changes.

SURVEYS AND MAPPING

The Division of Surveys and Mapping employed six field parties regularly during the past year.

NUMBER OF SURVEYS

A total of 264 surveys were undertaken as follows:

Public Improvement Surveys		
Public Assessment and Private Contracts	55	
City Pay Contracts	194	249
Lot and Topographic Surveys		
For City Architect		
Lot and Topographic	5	
Topographic	4	9
For Recreation and Park Department		
Lot and Topographic	1	
Topographic	2	3
For San Francisco Redevelopment Agency		
Lot Location Surveys, Diamond Heights	2	2
For Real Estate Department		
Lot Location Surveys, Surplus School Property	1	1
Total Number of Surveys		264

Survey fees, covering Public Assessment and Private Contracts, received during the year amounted to $23,150.

SURVEY MILEAGE

Surveys run are segregated by type of work as follows:
(Project lengths are shown unless otherwise noted.)

Site and Lot	Boundary lengths	2.01 miles
	Topography	15.15 acres
Cross section for estimate and design of new street and sewer work		2.22 miles
Line and Grade	Sewers	3.40 miles
	Grading, new street work	2.04 miles
	Curbs and Paving, new street work	2.88 miles
Line and Grade and Cross Section	For reconstruction existing pavements	0.29 miles
	For reconstruction existing curbs and gutters	2.94 miles
	For reconstruction existing pavement and track removal	1.17 miles

Examinations	Sewers	2.24 miles
	New street work	2.27 miles
	New street grading	2.33 miles
Subsidence		0.72 miles
Slide areas		2.79 miles
Miscellaneous Type		6.68 miles
Reference Survey Cuts (Miles of lot frontages)		7.93 miles
Reset and Reference Survey Monuments		20 each
Repair Survey Monuments		19 each
Grade Studies		0.30 miles
Block Resurveys (Miles of block frontages)		7.29 miles
Monument Lines Checked		7.22 miles
Total of Surveys	56.72 miles	
	15.15 acres	
	39 each, monument operations	

PRECISE LAND SURVEYS

Precise level bench marks established and new elevations determined on existing bench marks, totaled 636. To accomplish the latter, approximately 24 miles of precise levels were run.

STREET AND SIDEWALK INSPECTION

The inspection of sidewalks and the supervision of street and sidewalk excavations was conducted by a staff of six Inspectors of public works construction and a Junior Engineer under the direction of an Assistant Engineer.

The inspections were made in connection with track removal and pavement reconstruction contracts, the Department's street resurfacing program, and in the investigation of claims and complaints. Sidewalk inspections covered approximately 42,000 lot frontages.

As a result of the inspections, 26,000 square feet of new sidewalk were installed during the fiscal year by the responsible property owners.

Through the 1934 Street Improvement Ordinance, a contract for the construction of an estimated 15,000 square feet of sidewalk was awarded to the Mac Construction Co. in June 1959. The cost of the work will be assessed to the owner of the fronting property.

Defective Sidewalk Repair Ordinance No. 9046 was enforced. This ordinance provides that the Department of Public Works shall repair defective sidewalks in cases where the owner, upon notification, has failed or neglected to do so. The cost of repair is an obligation of the owner of the adjacent property and is secured by a lien on the property if the owner does not reimburse the City. Funds provided in the Delinquent Sidewalk Repair Revolving Fund cover the cost of repairs, and the fund is replenished by the money collected from the property owners.

210 reports were forwarded to the City Attorney's Office covering the field investigations, and making recommendations, relative to claims which had been filed against the Department of Public Works during the fiscal year 1958-1959. The claims, in general, were filed for injuries and property damage allegedly due to falls on streets and sidewalks.

As a result of court actions, members of the staff were called upon to give depositions, supply answers to interrogatories submitted by attorneys for plaintiffs, and to appear as witnesses in Court.

Under present law, damages due to defective pavements or sidewalks are the responsibility of the Department of Public Works, if negligence in making repairs can be shown.

Contractors and utility companies assume the defense and hold harmless the City and County of San Francisco for claims arising from their work.

The staff also investigated and acted upon 110 Requests for Action initiated by the Chief Administrative Officer, most of which involved various types of street and sidewalk obstructions placed in violation of the Public Works and Police Codes.

Other street maintenance inspections and permit investigations included utility excavations, tank installations, driveways, use of street space, pavement defects, house moving, blasting, and street flower stands. Activities are illustrated by the following summary:

INSPECTIONS, NOTICES, PERMITS AND INVESTIGATIONS

1.	Curb lowering permits and inspections	1,348
2.	Ownership addresses researched	2,260
3.	Preliminary sidewalk repair notices served	12,398
4.	Formal notices to construct or repair sidewalks	905
5.	Notices to remove obstructions, oil, etc.	1,040
6.	Notices to replace side sewer covers	1,532
7.	Street Space permits and inspections	3,686
8.	Sidewalk tank excavation permits and inspections	413
9.	House moving permits and inspections	169
10.	Defects in pavements reported (written)	1,798
11.	Damaged signs reported	221
12.	Excavation permits approved	16,726
13.	Excavation repaving inspected	3,316
14.	Posting Notices of Improvements	1,061
15.	State Encroachments Permits obtained	45
16.	Asphalt samples for analysis	12
17.	Claims investigations and inspections	823
18.	Special investigations and permits (Blasting, etc.)	4,704
19.	Correspondence answered	496
20.	Personal and telephone calls of complaints or for information	15,400
21.	Building Permit driveway plans, checked	1,063
22.	Notices of Street Construction	4,116
23.	Number of Sidewalk frontages inspected	42,000
24.	New Sidewalk installed after notice (sq. ft.)	26,000

LANDSLIDE CORRECTION

GENERAL

During the fiscal year, principally because of the sparsity of rainfall, no new slides occurred, and the existing slide areas under observations showed little or no movement. The rainfall in San Francisco from July 1, 1958 to June 30, 1959 as recorded by the Federal Weather Bureau, totalled 10.46 inches, which amount is approximately 51% of the annual average and only 29% of the 36.48 inches recorded for the previous fiscal year, 1957-58.

As in the past, the Bureau of Sewer Repair made weekly measurements of the flows from drains constructed in the slide areas, and the information obtained was analyzed to determine the effectiveness of the drainage systems and the need for additional facilities. In addition, surveys to check stability, and rate of movement if any, were made periodically at many of the slide locations. The continued stability of the slides at which the City had completed the construction of drainage systems attested to the effectiveness of the system.

Comments on the slides which received attention during the fiscal year are as follows:

Bache Street Slide

Twin Peaks Boulevard Slide

To all intents and purposes, both the Bache Street Slide and the Twin Peaks Boulevard Slide may be considered stabilized. However, semi-annual movement and subsidence surveys are still being continued to detect any variations. No movement of any sort has been detected so far.

Parker Avenue Slide

Movements in the Parker Avenue Slide area have continued but only at a very nominal rate. At the end of the fiscal year, plans and specifications on extensions to the existing drainage system had been advertised for bids. The work involves the drilling of three drainage shafts to connect to the existing drainage tunnel in Parker Avenue and the construction of 10 additional vertical drain shafts, backfilled with rock at the south end of the existing system. It is expected that the completed extensions to the system will stabilize the slide area to the extent that all movement will cease.

Ingerson Avenue Slide

Because of the recorded continuous movement of the slide area underlying Ingerson Avenue south of Bret Hart School, it was decided the only means of providing a satisfactory permanent Ingerson Avenue roadway as part of the access road network to Candlestick Stadium was to bridge the slide area.

Accordingly, a contract for the construction of a reinforced concrete viaduct with a precast, prestressed concrete deck slab supported on drilled-in-place concrete pile foundations was awarded in August 1958, and at the end of the fiscal year construction of the viaduct was 95% complete.

In connection with construction of the viaduct, much of the material forming the old roadway and slope was excavated and

INGERSON AVE.
Looking Northwesterly

INGERSON AVE.
Looking Northwesterly—Placing Deck Slab

hauled away, resulting in a considerably more favorable slope condition than that previously existing. Also, since the slide area is now partly covered by the viaduct, it will be protected to a greater extent from the weather. It is believed that pile foundations supporting the viaduct will also tend to impede earth movement.

As a means of gathering practical field data, twelve Carlson strainmeters were installed in the piling of one of the bents located in the middle of the slide area. Information relative to the magnitude of the lateral soil pressures gained from periodic readings of the strainmeters, correlated with surface movement surveys, are expected to be of great value in the design of foundations in other slide areas.

El Camino Del Mar Slides

It has been determined that the El Camino del Mar easterly slide has reached a stage where it is no longer economically nor physically feasible to maintain relative stability. The scenic road crossing the slide area has been closed to the public for the past 3 years. During the past fiscal year, in which there was very little rainfall, slide movements contined to take place at a rate varying from zero to a maximum of approximately 1-1/2 inches per month. Maximum total annual displacements at the end of the fiscal year were 17 inches northward and 13 inches westward.

At the end of the fiscal year, following an extensive boring contract completed in 1957, preliminary studies for a proposed bridge to span the easterly slide area were completed. The tentative design finally selected for further cost studies after a careful analysis of all factors, including safety, was a 4-lane, 3-span, continuous steel plate girder bridge with end spans of approximately 98 feet and a central clear span of 280 feet. The approximate depths of girder would be 15 feet at the supports and 8 feet at the center. Piers would be located outside the edge of the slide scarp and supported on a grouted steel H-pile foundation driven into bedrock. The total width of the bridge would be 58 feet with a 2-foot-wide curb along the south side, a 48-foot roadway, and an 8-foot sidewalk along the north side. It is expected that plans and specifications for the bridge will be ready for bid some time in June 1960.

The El Camino del Mar westerly slide continued to creep slowly in a northeasterly direction at a rate varying from 1/8 inch to 3-1/4 inches per year.

Stabilization of the roadway through the westerly slide area by excavating and hauling away excess materials, and by installing an intercepting drainage system, following which the roadway will be repaved, will be undertaken in the early summer of 1960. It is contemplated that the work will be incorporated in the same contract under which the aforementioned bridge over the easterly slide area will be constructed.

TRAFFIC ENGINEERING

ADMINISTRATION

In the November 1958 election the voters of San Francisco, by a heavy margin approved the passage of Charter Amendment I which transferred the responsibility and authority for the installation of traffic control devices from the Police Department to the Department of Public Works. Since then practically all the functions formerly handled by the Police Department in regard to traffic control devices have been turned over to the Department of Public Works. The sole exception is the supervision of and determination of the need for curb painting which continues to remain with the Police Department at the present time because of the lack of man power in the Department of Public Works to make field investigations.

After an interim period of experimentation, procedures for determining the need and seeking legislation for actions such as the placing of stop signs, speed limits, one-way streets, etc., have been streamlined and adopted into the framework of the Traffic Engineering Division. One innovation worthy of note has been the use of the Interdepartmental Staff Committee on Traffic and Transportation, comprised of representatives of the Department of Public Works, Police Department, Municipal Railway and Department of City Planning, to bring proposals for traffic control before each of the interested departments and also to expedite police review of these matters as required by Charter Amendment I. As of yet, with the exception of one added position there has been no expansion of the Division as visualized in Plan C and mentioned in last year's Annual Report.

DOWNTOWN SECTION

A new section devoted exclusively to the study of and correction of traffic problems in the Central Business District has been organized during the past year. Appropriately named the Downtown Section, it consists at present of an engineer and a draftsman. Reports have been prepared on such diverse projects as garage operating efficiency at the 5th and Mission Garage and Powell Street cable car accidents. It is hoped new personnel can be added to this section because of the tremendous demands for improved operating efficiency in the central core of San Francisco.

PARKING

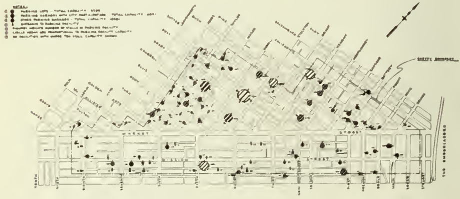
The residential building boom has continued unabated, necessitating a continuing need for checks of offstreet parking layouts. During the year 104 formal parking checks were made covering 2,653 stalls for the Department of City Planning.

Reports or studies were also made for the San Francisco Parking Authority on the following projects:

1. Redevelopment Area E Parking Garages
2. Civic Center Garage
3. Portsmouth Square Garage
4. Sutter-Stockton Garage
5. Fifth and Mission Garage
6. Off-Street Parking Inventory for Downtown San Francisco

The results of the survey in the core of the Central Business District are shown on the accompanying plate. Within the boundaries of the area the survey showed that there were 3,709 parking spaces in parking lots, 4,851 spaces in parking garages in which the City had participated in one way or the other, and 10,581 spaces in other garages.

The Fifth and Mission study covered operational practices in the Fifth and Mission Garage and suggested certain improvements in order to reduce operational costs and increase the efficiency of the garage. The Civic Center study projected present and future patronage of the garage in order to determine policy in regard to renting the bottom floor of the garage to the State of California for use of their vehicles.



OFF-STREET PARKING FACILITIES IN DOWNTOWN SAN FRANCISCO
1959

FIG. 5

TRAFFIC SIGNS

The past year witnessed the final development of an IBM system of recording traffic signs. The year before a system was devised to record and keep an inventory of all traffic signs, and last year field forms were developed which combined an IBM recording process and an order form for traffic signs. When the sign surveyor locates a new or damaged sign he fills out a form which not only gives the sign description and location for use in ordering but also gives all the pertinent coded data for use in punching business machine cards.

TRAFFIC PLANNING

The Traffic Engineering Division continues to give more and more attention to traffic planning with the result that traffic planning is now a full fledged section in the Division. Below is a partial list of projects, exclusive of parking, for which studies and reports were made or advice concerning aspects of design were given:

1. Various Subdivision Layouts
2. University of California Medical Center
3. Geary Expressway Pedestrian Overpass
4. McLaren Park Roads
5. Redevelopment Area E
6. Hunters Point Expressway
7. Civic Center Redevelopment Plan
8. 19th Avenue Underpasses
9. Geary Expressway
10. Civilian Defense Evacuation Plan
11. Double Rock Housing Project
12. Bay Bridge One Way Plan
13. Candlestick Park

TRAFFIC SIGNALS AND CHANNELIZATION

Last year witnessed the awarding of two major and two minor traffic signal channelization contracts. The minor contracts consisted of revisions in the Western Addition and Downtown traffic signal systems and the addition of signal dials to the Fell and Oak Street System. The major contracts were for the completion of traffic signals and channelization on Market Street and the installation of signals under the 17th Isolated Signal Contract. The signal system which was installed as part of the Geary Boulevard widening project is in many ways unique to San Francisco. A carefully studied traffic control plan was put into effect which called for the installation of traffic signals in a pattern consisting, in general, of two successive intersections being signalized, the two following being non-signalized and providing for a progressive speed of 25 miles per hour. The 14-foot wide center island provides for pedestrian protection, especially at those intersections that are not signalized. Left turns are permitted at the non-signalized intersections only and left-turn havens are provided in the center islands at these locations. This was done because progressive signal control and platooning of vehicles practically insures that left turns can be made at these locations without conflict from traffic flowing in the opposing direction.

The Clarendon Avenue project also provided for a 14-foot center island. On this important artery the intersections were planned so that no traffic is allowed to cross Clarendon Avenue. Access is provided only by means of left or right turns into and out of the street. Left turn channels are protected within the center island.

RESEARCH

An important research project involving the relationships between traffic signals and traffic accidents were also completed. A complete four-year before and after accident study was made for 201 signalized intersections. The study showed that at those intersec-

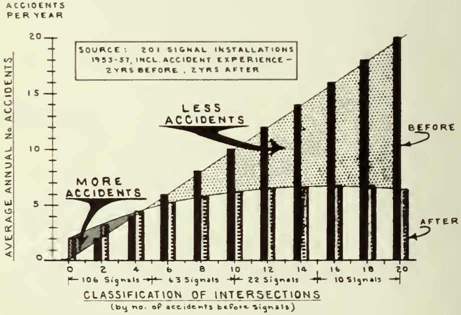


FIG. 6
EFFECT OF SIGNALS ON TRAFFIC ACCIDENTS IN SAN FRANCISCO

tions where less than five accidents occurred per year before signals were installed there had been an increase in the accident experience and that at those intersections where more than five accidents per year occurred the accident rate had decreased. The relationships are shown on the enclosed chart. It indicates that when signals are installed where they are not warranted they may not only be wasteful of public monies but may actually be inimical to public safety.

OPERATIONAL TRAFFIC STUDIES

Traffic surveys and studies were made on the following projects:

1. Islais Creek and Channel Street Lift Bridge Openings
2. Peak Hour Flow Map
3. Origin and Destination Survey for Hayes Street
4. Parked Runaway Accidents
5. Park and Shop Market at Funston Avenue and Irving Street
6. Safeway Market at Marina Boulevard
7. Coit Tower Congestion
8. Peak and Off-Peak Travel Time Maps

The Travel Time Maps summarize the results of speed and delay runs in both evening peak and off-peak hours with a starting point at Third and Market Streets. The results were compared with a similar survey taken in 1937. Regarding the peak hour it was shown that vehicle speeds showed changes ranging from a decrease of 18%, to an increase of 63% between 1937 and 1958. Peak hour volume changes at the same time increased anywhere from 43% to 175%. On an overall basis it can be said that the traffic movement in the evening peak hour has improved from 1937 to 1957. The off peak hour studies showed an even more marked improvement again despite heavy increases in off-peak traffic volumes. The speed improvement between 1937 and 1958 ranged from 1% to 60% while the volume increases ranged between 50% and 146%.

The sections of the City that showed the most marked improvement in the movement of traffic were those that were served by the James Lick and Central Freeways but the fine record of the other sections despite the increase of traffic can be attributed to the application of sound engineering principles and to the use of improved traffic control devices and techniques.

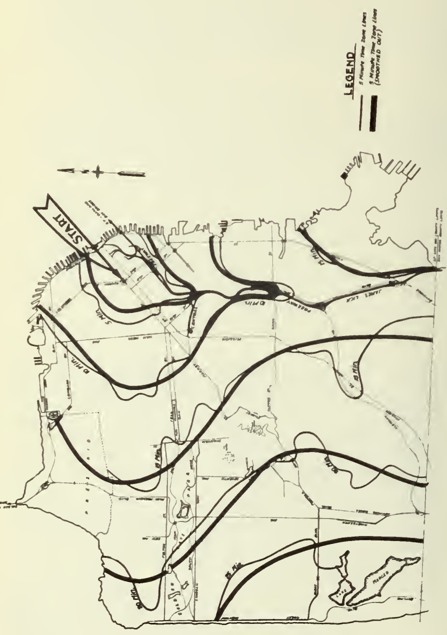


FIG. 7
VEHICULAR TIME ZONES IN SAN FRANCISCO
P.M. PEAK 1958

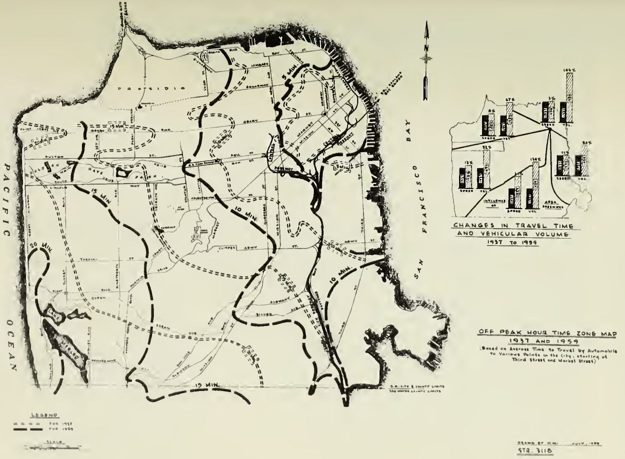


FIG. 8
CHANGES IN OFF-PEAK HOUR TRAFFIC CONDITIONS—1937 AND 1959

TRAFFIC OPERATIONAL PROBLEMS

The largest section of the Traffic Engineering Division is the Operations Section. This unit handles day to day operating problems and makes changes in traffic signals, painting, signing and minor channelization to reduce accidents and to keep traffic moving.

An example of what is done by this section can be shown by the operational changes that were adopted when the Central Freeway was extended to Oak and Fell Streets. Traffic studies indicated that the extension of the freeway to Fell and Oak Streets would greatly increase the volume of traffic on those streets. To counter this problem it was determined that a longer traffic signal cycle would be needed together with the installation of afternoon peak hour towaway on Fell Street and forenoon peak hour on towaway on Oak Street. In addition, the capacities of certain important streets crossing Fell and Oak Streets would have to be increased because of the reduced amount of green time that would be available to them. This was done by instituting peak hour towaway regulations on these streets for a block on either side of Fell and Oak Streets together with peak hour turning restrictions. "After" speed and delay runs indicated that the measures adopted were very successful. Despite the huge increase in volume, traffic flowed freely in the peak hours after the freeway connections were opened.

TABLE III
TRAFFIC FACILITIES AND IMPROVEMENTS

	Completed 1958-1959	Approximate Cost 1958-1959	Number In Place 6-30-59
TRAFFIC SIGNS			
Parking Signs Installed	397		
Parking Signs Repaired or Changed	312		
Parking Signs Removed	228		
Other Signs Installed	489		
Other Signs Repaired or Changed	750		
Other Signs Removed	129		
Stop Signs Installed	62		
Stop Signs Repaired or Changed	322		
Stop Signs Removed	30		
Total	2,719	$37,678.40	20,000 est.
STREET NAME SIGNS			
Street Signs Installed	57		
Street Signs Repaired or Changed	923		
Total	980	$29,131.64	7,550 est.

TABLE III - Continued

	Completed 1958-1959	Approximate Cost 1958-1959	Number In Place 6-30-59
PARKING METERS			
New or Amended Zones	0	0	12,500
New Installations	109		
Removals	108		
Relocations	42		
Temporary Removals	64		
Replacements	33		

The above table does not include the normal maintenance of parking meters performed by the Department of Electricity.

	Completed 1958-1959	Approximate Cost 1958-1959	Number In Place 6-30-59
TRAFFIC PAVEMENT PAINTING			
Standard Striping, miles	582.46	$49,340.31	
12-inch Stripes, miles	130.7	84,845.03	
Pavement Words (Units) (Cost inc. in other items)	10,967.		
Bus Zones (Units)	1,900	13,499.26	
Parking Stalls (Units—all types)	6,070	5,358.70	
Total Cost		$153,043.30	
New School Intersections	7		779
SIGNALIZED INTERSECTIONS			
Wiley Type Signals Replaced	11		
3-Light Installations	32		
Net Increase	21		675
Wiley Type Signals Existing			3
Total Signals			678
Equipped with Pedestrian Signals	6		163
Actuated Signals Added	2		157
CHANNELIZED INTERSECTIONS			
Concrete Islands	5		192
Raised Pavement Bars	8		25
Total	13		217
DIVIDED ROADWAYS			
Concrete Center Islands, miles	3.76		51.9

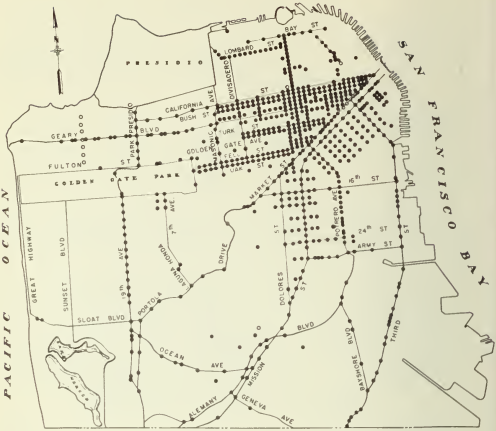


FIG. 9
3-LIGHT TRAFFIC SIGNAL INSTALLATIONS

SEWAGE SYSTEM

GENERAL

The expansion and modernization of the City's sewerage and drainage system continued to progress, principally under the sewer bond program. Included in the work were planning, design, and the preparation of contract plans and specifications for new storm, sanitary, and collecting sewers, sewer structures and pumping stations, for the replacement of existing obsolete sewerage facilities, and for improvements to the City's three sewage treatment plants.

In addition, inasmuch as the approval of the Bureau is required for proposed sewerage and drainage facilities for new subdivisions, redevelopment areas, freeways, public garages and other improvements the review of plans and specifications prepared by others for such facilities was, as in the past years, a continuing procedure. Major examples of such work undertaken during the fiscal year was that for Redevelopment Area E-1, Forest Knolls Subdivisions, the Southern Freeway, and the Civic Center Garage. Also undertaken as a continuing procedure were investigations of the sewerage and drainage systems in relation to complaints, vacations of street areas, easements, and for other miscellaneous reasons.

FUNDS

Expenditures

Sewer contracts awarded during the year, including collecting sewers and sewer work in major street reconstruction contracts, exclusive of assessment projects, were as follows:

Sewer Replacement and Extensions	$ 260,030
Sewers in Contracts for Street Reconstruction and Widenings, Track Removal, and Civic Improvements including the Candlestick Stadium Area	180,400
Collecting Sewers and Pumping Stations	683,650
Total	$1,124,080

Bond Issue Balances

The balances remaining in the various Sewer Bond accounts at the close of the fiscal year were as follows:

	Bond Issue Total	Approximate Balance
1944 Sewer Bonds	$12,000,000	$ 740,000
1948 Sewage Treatment Bonds	$15,000,000	$ 270,000
1954 Sewer Bonds	$12,645,000	$7,300,000

SEWER SYSTEM PROJECTS

General

A number of projects to expand the sewerage system, to replace sewers in poor condition, to increase sewer capacity, and to relocate or improve the sewer system in connection with street widenings and other improvements, were undertaken during the fiscal year.

Some of the more notable projects, which included collecting sewers as well as storm and sanitary sewers, are described below:

Griffith Street Outfall Sewer

A contract for the construction of 1,085 linear feet of 5'-6" diameter monolithic reinforced concrete sewer on piles in Griffith Street from Shafter Avenue to the South Basin Canal, to permit development of the filled-in tide lands in this portion of the South Basin area, was awarded in September 1958 at a cost of $177,200, and the work was 99 percent complete at the end of the fiscal year.

A diversion structure with tide gates to divert the sanitary sewage flow to the Yosemite Pump Station, was constructed at the outfall of the sewer in South Basin Canal.

Steiner and Green Streets Sewer

An investigation was made of the sewers in Steiner Street between Union Street and Green Street, and in Green Street between Steiner Street and Pierce Street, following receipt of a complaint by an adjacent church that cracking of the building and the presence of water beneath the church were observed. The sewers, by means of dye tests, were found to have leaky joints and, as they had required repairs in the past, a contract was awarded in April, 1959 for their replacement. The work which was completed prior to the end of the fiscal year at a contract cost of $28,200, consisted of the construction of 310 linear feet of 24-inch diameter vitrified clay pipe sewer on concrete foundation in Steiner Street and 420 linear feet of 12-inch diamteer vitrified clay pipe sewer in Green Street.

Newcomb Street Sewer

A contract to replace the existing sewer in Newcomb Street between Selby Street and Rankin Street because of breaks, sags and misalignment resulting, principally, from settlement, was awarded in April 1959. The work, completed prior to the end of the fiscal year at a contract cost of $19,750, consisted of the construction of 640 linear feet of 21-inch diameter vitrified clay pipe sewer on reinforced concrete foundation. Because of anticipated settlement, a flexible joint was designed for connecting the sewer to an existing large concrete sewer on piles.

Fourteenth Street Sewer

An emergency contract to replace the sewer in Fourteenth Street, between Buena Vista and Alpine Terraces, that had failed and had undermined the street pavement was awarded in July, 1958 and completed within two months. The contract cost of the work, which consisted of the construction of 275 linear feet of 21-inch and 18-inch diameter vitrified clay pipe sewer, nearly all of which was placed on reinforced concrete foundation, add the reconstruction of the street pavement from curb to curb, was $12,100.

Guniting of Golden Gate Avenue Sewer

A contract for constructing a 3/4-inch thick gunite lining in the existing 3-foot by 5-foot sewer in Golden Gate Avenue between Steiner and Webster Streets was awarded in April, 1959 and the work is expected to be finished by late summer this year. The work, which covers 1,020 linear feet of sewer or 12,950 square feet of interior surface, will cost about $9,453 based on a unit bid price of 73 cents per square foot of gunited surface.

Quarry Drainage at 26th Street

To assure against a recurrence of conditions that cost the life of a small boy by drowning in the rain-filled quarry excavation at 26th Street and Grand Avenue, the quarry was graded under an emergency contract in January, 1959 to establish adequate surface drainage.

Masonic Avenue and Panhandle Sewer

A contract to construct several catchbasins and a sewer to prevent the pooling of water where Masonic Avenue passes through the Panhandle of Golden Gate Park was awarded and completed during the fiscal year at a contract cost of $4,080.

Sewers in Street Projects

Sewerage and drainage work, at the cost indicated, was incorporated in street widening and track removal projects as follows:

Clarendon Avenue Widening and Channelization	$12,300
Geary Street Track Removal: Market to Franklin	$ 1,000

Candlestick Park

The descriptions and contract costs of sewer projects done in conjunction with the access road network to Candlestick Park appear elsewhere in this Report.

North Point Collecting Sewers, Section D-1

A contract for the construction of Section D-1 of the North Point Collecting Sewers, consisting of a large pumping station, a diversion structure, and 190 linear feet of 4'6" diameter reinforced concrete intercepting sewer, all on piles and all located in Fourth Street south of Berry Street, was awarded in February 1959 at a bid price of $438,900. Construction was 9 percent complete at the end of the fiscal year.

The pumping station is designed to pump an average flow of 7 million gallons per day and a maximum flow of 12 million gallons per day to the North Point Main Sewer in Howard Street through a 30-inch diameter force main to be constructed under a subsequent contract. The diversion structure will divert sewage from the present sewer in Fourth Street to the 4'6" diameter interceptor.

Other intercepting sewers are to be constructed under subsequent contracts to collect and bring sewage from Second, Third, Fifth, Sixth, Seventh, Townsend and Brannan Streets to the pumping station.

The bid price on this contract is $438,900.

North Point Collecting Sewers, Section B-2

Construction of Section B-2 of the North Point Collecting Sewers, started in 1957, was 75 percent complete at the end of the fiscal year. Considerable delay in the progress of this work was caused by conflicts arising out of the construction of the Embarcadero Freeway which was proceeding through the same area.

The average flows in the sewers included in the Section B-2 contract will be 1.9 million gallons per day from the Jackson Street diversion structure, and 1.2 million gallons per day from the Howard street diversion structure. These quantities will be delivered to the pumping station that is to be constructed under another contract.

The bid price was $459,200.

Southeast Collecting Sewers, Section K-1

Construction of Section K-1 of the Southeast Collecting Sewers, consisting of a diversion structure and of sewers in Rankin Street and in Davidson Avenue was started in early 1958 and completed during the fiscal year.

Local sanitary sewage will flow southerly in Rankin Street away from Islais Creek and then through the Davidson Avenue Sewer to existing sewers connected to the Southeast Sewage Treatment Plant.

The contract cost was $151,200.

Southeast Collecting Sewers, Section H-1, H-2 and H-3

Construction of Section H-1, H-2 and H-3 of the Southeast Collecting Sewers, which started in early 1958, was completed during the fiscal year at a cost of $78,100. An average of 2 million gallons per day of sanitary sewage is now being diverted from the Sunnydale Avenue Outfall Sewer northerly through the Candlestick Hill Sewer Tunnel to the Yosemite Pumping Station.

The contract cost was $78,100.

Vicente Street Sewage Pumping Station

A contract for alterations to the sump of the Vicente Street Sewage Pumping Station, in order to reduce station maintenance costs, was awarded in June 1959 and work was expected to be completed within 60 days thereafter at a cost of about $4,750.

PLANNING

General

Planning for, design of, and preparation of contract plans and specifications for several major projects for the further expansion and modernization of the City's sewerage and drainage systems was in progress throughout the fiscal year. Descriptions of the most notable of the projects in various states of completion follow:

Division Street Auxiliary Sewer, Section "A"

Plans and specifications for an 8'3" x 9'6" monolithic reinforced concrete auxiliary sewer to supplement and run adjacent to the existing 3-compartment sewer in Division Street, were completed during the fiscal year. It is expected that the contract for the auxiliary sewer will be advertised for bids late in 1959. The preliminary estimated contract cost was $450,000.

Geary Expressway Sewers

Plans and specifications were completed for the sewer work to be done in conjunction with the construction of the Geary Expressway from Presidio Avenue to Franklin Street. The preliminary estimated contract cost for the sewer work is $216,000.

Lincoln Way Auxiliary Sewer, Section "C"

Hydraulic investigations and plans for an auxiliary sewer in Lincoln Way between Twentieth and Twenty-ninth Avenue were approximately 25 percent complete at the end of the fiscal year, and it is expected that a call for bids will be made late in 1959. The preliminary estimated contract cost is $250,000.

Alemany Boulevard Sewers

Planning for, and the design of sewers in Alemany Boulevard east of Mission Street, necessitated by future Southern Freeway construction, was approximately 25 percent completed at the end of the fiscal year.

The actual sewer construction work, which will result in replacement of the existing system with larger size sewers in accordance with the anticipated ultimate capacity, some as large as 13 feet in diameter, will be done by the State Division of Highways under its freeway construction contracts.

It is estimated that the work will cost about $500,000. The major portion of the cost will be borne by the State of California.

Franklin and Bay Streets Sewer

Preliminary investigations and hydraulic studies commenced for a sewer in Franklin Street and in Bay Street to relieve conditions of flooding in the vicinity of Franklin and Union Streets. The preliminary investigations and hydraulic studies commenced for a sewer in Franklin Street and in Bay Street to relieve conditions of flooding in the vicinity of Franklin and Union Streets. The preliminary estimated contract cost was $250,000.

Sewers for Subdivisions and Redevelopment Areas

As mentioned hereinbefore, plans and specifications for sewerage and drainage facilities prepared by others for new subdivisions, redevelopment areas, etc., are subject to the approval of the Bureau of Engineering and, as such, were a source of continuing investigation and review.

North Point Collecting System

Progress continued on the design of the North Point Sewage Collecting System under the program for the cleaning up of San Francisco Bay waters in conformity with State of California requirements, although some phases of the work were delayed due to difficulties in acquiring property.

The final design of Section B-3 of the North Point Collecting Sewers was deferred because of land acquisition problems encountered following a resolution by the Board of Supervisors in which they declared their intention to relocate the entire produce market industry from within the area which the proposed site of the pumping station is located. Action had been initiated by the end of the fiscal year to clarify the situation relative to the pumping station site, and it was anticipated that the design of the station would resume in July, 1959.

Contract plans and specifications were prepared for Section D-4 of the North Point Collecting Sewers, consisting of the Berry Street intercepting sewer in Berry Street between Fourth and Seventh Streets. The intercepting sewer, when the system is complete, will carry sewage from Fifth, Sixth and Seventh Streets sewers. The contract cost of the project, which includes approximately 2300 linear feet of 2'6" x 3'9" reinforced concrete sewer, was estimated at $480,000.

Planning for Section D-3 of the North Point Collecting Sewers, consisting primarily of the Seventh Street diversion structure, was started during the fiscal year but was then delayed because of problems affecting the disposition of State-owned land at the head of the China Basin Channel, the proposed site for the diversion structure. As soon as these difficulties are cleared, the preparation of contract plans and specifications will be expedited.

The diversion structure will be designed to pass a storm flow of 2,800 cubic feet per second, which will make it the largest diversion structure in San Francisco.

The structure will divert sanitary flow from a 4-compartment sewer, of which each compartment measures 8'3" x 9'6", to the North Point Sewage Treatment Plant. This project, which will include the structure, a portion of intercepting sewer and an extension of the 4-compartment sewer, is estimated to cost $850,000.

During the fiscal year, the design of Sections D-6 and D-7 of the North Point Collecting Sewers which include diversion structures and intercepting sewers in Fifth Street and Sixth Street between the Channel and Berry Street, was begun. These systems will divert sanitary flow from the sewers in Fifth and Sixth Streets, to the Berry Street Interceptor Sewer.

The design of Section D-2 of the North Point Collecting Sewers, the Fourth Street sewage force main, was approximately 60 percent complete by the end of the fiscal year. This project includes 3,625 linear feet of 30-inch diameter concrete pipe force main, of which 500 feet will be encased in corrugated metal pipe where the main passes under the Southern Pacific Company railroad tracks, and 400 linear feet of 24-inch diameter pipe sewer. The force main is designed to carry an average flow of 7 million gallons per day and a maximum flow of 12 million gallons per day.

The project is estimated to cost $270,000.

SEWERS IN CANDLESTICK PARK AREA

Contracts were awarded during the previous fiscal year for sewers on piles, in Gilman Avenue, between Griffith Street and Hunters Point Expressway and for sewers in Fitch Street and Carroll Avenue.

During the current year, contracts were awarded which included the following sewers, the approximate cost of sewer work being as indicated:

	Contract Cost
Mendell St.: Williams to Yosemite 300 lin.ft. of 24", 21", and 18" V.C.P. sewers, mostly on concrete base foundations.	$18,240
Ingerson Ave.: Hawes to Griffith V.C.P. sewers, and cast iron pipe for portion of sewer on viaduct.	9,120

	Contract Cost
West Access Road 900 lin.ft. of 21", 15" and 12" V.C.P. sewers mostly on concrete foundation and on piles	31,040
Gilman Ave.: Third to Griffith Streets 300 lin.ft. of 12" V.C.P. sewer	7,900
Hunters Point Service Road from Jamestown Ave. to Gilman Ave. Storm Water Inlets and Culverts to the Bay	9,170
Jamestown Ave.: Gilroy to Hunters Point Expressway	36,460
Jennings: Van Dyke to Carroll 800 lin.ft. of 21", 18", 15" and 12" V.C.P. sewers.- Part of the cost was paid by assessment.	26,930
Jamestown: Ingalls Street to Gilroy Street 1500 lin.ft. of 21", 18", 15" and 8" V.C.P. sewers.- Part of the cost was paid by assessment.	28,280
Jamestown Ave.: Gilroy St. to Hunters Point Service Road (1900 feet of pipe sewer, 15", 18" and 24" diameter)	74,262
Ingerson Ave.: Hawes St. to Griffith St. (315 lin.ft. of 12" V.C.P., 345 lin.ft. of 12" C.I.O. supported from viaduct)	183,568
Hunters Point Service Road (Drainage)	63,199
Fitch St. and Carroll Ave. (910' of 6'9" diameter; 220' of 5'6" diameter; 450' of 4'6" diameter reinforced concrete sewer on piles)	261,789
Total Cost	$749,958

All sewers and drainage work will be completed by next September when it is hopefully anticipated that the Candlestick Park Stadium will be put to use.

ENGINEERING SURVEYS AND STUDIES

Electrolysis Survey

An electrolysis survey and report of the changes in electrolysis conditions of the high pressure auxiliary water supply system from those that existed in 1954, the date of the last survey, was made during the fiscal year at the request of the fire Department.

The continued removal of street car tracks and installation of insulated negative conductors for the street railway system were considered to be the principal causes for the changes in the electroysis conditions in the high pressure system that brought about the survey.

Sewer Standards

Following studies during the fiscal year, new standards were adopted, or in the process of being adopted, for catchbasin gratings, vitrified clay pipe sewer joints, and centrifugally spun reinforced concrete sewers.

Because of superior inlet characteristics, a catchbasin grating with bars and openings parallel to the line of flow was in the final design stage at the end of the fiscal year. Polyvinyl-chloride joints for vitrified clay pipe sewers, which provide more flexibility and water tightness than other conventional joints, were adopted and specified in contracts during the fiscal year. Inasmuch as centrifugally spun reinforced concrete pipe with bell ends was made available through the larger sizes of pipe up to 72-inch diameter, bell and spigot joints for this type of pipe, in preference to the tongue and groove type joints, were standardized and used.

Investigation into the use of sulphite-resisting cements in sewers and sewer structures was still in progress at the end of the fiscal year.

AUXILIARY WATER SUPPLY SYSTEM

Golden Gate Park Crossing

The installation of approximately one mile of auxiliary water supply system high pressure supply line across Golden Gate Park, for which a contract was awarded in February 1959, was 80 percent complete at the end of the fiscal year. The contract cost was $65,555.

Geary Street Cisterns

Construction of three 75,000 gallon reinforced concrete cisterns in Geary Street, started in January 1959, was 30 percent complete at the end of the fiscal year. The contract cost was $75,300.

Utility Improvement Investigations

Investigations were made at approximately 120 locations to determine if Auxiliary Water Supply System facilities were in conflict with City, State or private utility company improvement projects.

Where it was determined to be best in the public interest that the Auxiliary Water Supply System facilities be relocated because of physical interference, the necessary plans and specifications were prepared. Whenever possible, the work of relocation was incorporated into the particular contract for the major improvement.

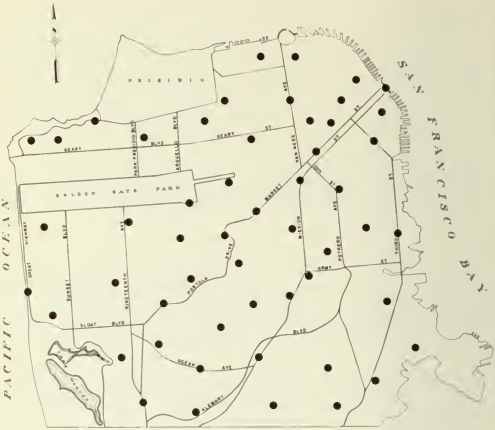
The cost of the aforementioned utility improvement investigations and preparation of plans and specifications was estimated at $20,000.

Air Raid Warning System

Fourteen air raid sirens were installed or modified during the fiscal year to bring the total in the air raid warning system to fifty-three, thirty-seven of which are 10 horsepower, fifteen 7-1/2 horsepower, and one 9-1/2 horsepower.

According to previous tests, the aforementioned installations and modifications would assure the City of adequate warning coverage.

The contract cost was $10,300.



LEGEND

● LOCATION OF SIRENS

FIG. 10
AIR RAID WARING SYSTEM
LOCATION OF SIRENS

Pedestrian Overpass at Brotherhood Way

At the end of the fiscal year, plans and specifications were completed and under review for a pedestrian overpass structure bridging Brotherhood Way (formerly Stanley Drive) at Thomas More Way.

The structure, which will provide convenient and safe access for school children and other pedestrians to the four church sites on the south side of the road, as well as to the existing school south of Brotherhood Way, will consist primarily of a prestressed concrete "double-tt" girder of an 88'6" main span, and side spans of 13'6" and 34'6". The approach on the north side will be at sidewalk grade on Chumasero Way, with a connecting ramp of 117 linear feet on a 9 percent grade to Thomas More Way on the south side. A 5'6" high railing will be installed on both sides of the overpass proper.

Geary Expressway Underpass at Fillmore Street

Plans and specifications for the Geary Expressway vehicular underpass at Fillmore Street, the second contract unit of the Expressway project, were completed just prior to the end of the fiscal year, and construction of the underpass is expected to start early in 1960.

The grade separation contract will include, in addition to the actual structure, the ramps, north and south service roads, retaining walls, and all other related improvements between Webster and Steiner Streets. The retaining wall heights will vary from a little more than 3 feet to approximately 27 feet at the lowest point of the underpass structure.

The structure, which will carry Fillmore Street across the Expressway, will bridge the 86-foot clear span with 12 prestressed concrete girders, each 87'10' long and 4'6" deep.

An extensive subsurface drainage system, and a pumping station located behind the northeast abutment of the bridge structure, will be constructed as part of the project to take care of the expected surface and subsurface drainage.

PUBLIC BUILDING CONTRACTS

The contract summary in Table I and the detailed listings contained in Appendix I include a number of contracts for improvement of public buildings and other facilities. Brief descriptions of the most representative of these miscellaneous projects, along with their contract costs, follow:

Christmas Tree Point Radio Communications Center

The construction of the municipal radio communications center on Twin Peaks Christmas Tree Point site was completed during the past fiscal year. This modern dual antenna station, constructed at a contract cost of $278,000, will provide the Police Department and the Disaster Council and Corps, as well as all other present and future City agencies having need of its services, with the finest in electronic communications facilities, while at the same time providing a park-type area for public observation of the excellent panoramic view of the City.

Stanley Drive Tool Shed

A tool shed for the storage of tools, equipment and supplies for the maintenance of landscaping in the vicinity of Stanley Drive was constructed during the fiscal year. The shed included provisions for the future installation of sanitary facilities for the gardener.

The contract cost was $2,000.

Municipal Asphalt Plant

An addition to the truck parking port at the Municipal Asphalt Plant to provide covered parking for 16 additional vehicles was constructed during the fiscal year at a cost of $18,190.

D.P.W. Maintenance Yard

The abandoned Islais Creek Incinerator plant located in the southwest portion of the Public Works Maintenance Yard was demolished during the fiscal year at a contract cost of $18,850.

Laguna Honda Home, Incinerator

The construction of a modern incinerator to replace the inadequate existing one, for which a contract was let in December 1957, was 99 percent complete at the end of the fiscal year.

The new incinerator is capable of consuming over 1200 pounds of miscellaneous refuse per hour, well in excess of the specified rate of 800 pounds per hour and has successfully passed a rigid air pollution test conducted by Bay Air Pollution Control District personnel. Emission from the incinerator stack during the test was only one-half of that allowable under existing Los Angeles air pollution regulations.

The contract cost was $44,850.

City Hall Rest Rooms

Renovation and modernization of the rest rooms in the southwest quadrant of the City Hall by replacing piping, plumbing fixtures and tilework was completed during the fiscal year, and a contract for the performance of similar rest room renovation in the northeast quadrant was awarded in April 1959.

Completion of the work in the northeast quadrant will bring all facilities in the City Hall rest rooms up to the high sanitary, functional and aesthetic standards which such facilities should have.

The contract costs were $9,400 for the southwest quadrant and $18,000 for the northeast quadrant.

Civic Auditorium Roof Drains

A contract for the northeast branch of the roof drain piping in the Civic Auditorium was completed during the fiscal year, 1958-59, leaving only the southeast branch to be replaced in the continuing project to replace all Civic Auditorium roof drain piping. It is expected that work on the latter branch would commence in November 1959.

The contract cost was $5,100 for the northeast branch and was estimated at $2,500 for the remaining southeast branch.

Enginehouse No. 36 Heating and Ventilation System

A contract for the installation of a central heating and ventilation system in Fire Department Enginehouse No. 36 to replace antiquated individual gas heaters was completed during the fiscal year at a cost of $3,500.

Taraval Police Station Steam Boiler

A contract for the replacement of the deteriorated steam boiler and related facilities for the Taraval Police Station heating system was completed during the fiscal year at a contract cost of $4,200.

Hall of Justice Air Conditioning

A contract for the installation of adequate air conditioning equipment in the radio room of the old Hall of Justice, to alleviate the unsatisfactory working conditions caused by the heat generation of high voltage electrical equipment, was completed during the fiscal year at a contract cost of $11,600.

Southeast Sewage Treatment Plant Sludge Dryers

An emergency contract for the reconstruction of the No.3 sludge dryer at the Southeast Sewage Treatment Plant, which had deteriorated through wear to the point of being unusable, was completed during the fiscal year.

The work under the contract included the replacement of several major components that were beyond repair, and the repair of other worn components. Materials of higher quality and heavier weight than those from which the dryer was originally fabricated were incorporated into the reconstruction. At the end of the fiscal year, the reconstructed No. 3 dryer was the only one in operation, and it was contemplated that deteriorated dryers Nos. 1 and 2 would be similarly reconstructed in the following fiscal year.

The contract cost for reconstructing the No. 3 dryer was $17,700.

Mechanical Work Included in Bureau of Architecture Contracts

During the fiscal year, plans, specifications and estimates of costs for mechanical work were made for the Bureau of Architecture for inclusion in certain of its contracts for new improvements at the San Francisco Hospital, Laguna Honda Home, Log Cabin Ranch School, City Hall, various schools and other miscellaneous projects.

The total amount for the mechanical work included in the various contract costs was approximately $425,000.

As in the past, plans and specifications were prepared by the Structural Section for inclusion in certain of the Bureau of Architecture contracts. The projects and approximate contract costs involved were as follows:

1)	Engine House No. 15, Retaining Walls	$ 54,700
2)	San Francisco Hospital, Project II, Service Building Transformer Pad	4,000
3)	San Francisco Hospital, Project III, Ward Building No. 10	10,000
4)	San Francisco Hospital, Consolidated Laboratories	8,600
5)	San Francisco Hospital, Isolation Bldg. No. 100, Reconstruction of Elevator	18,000
	Total	$ 95,000

Projects in which this Section furnished advice or reviewed plans and specifications were as follows:

		Approximate Contract Cost
1)	Civic Auditorium, Catwalks, Job 1726	$ 18,000
2)	Lincoln High School, Athletic Field Bleachers	275,000
3)	Polytechnic High School, Alterations to 4th Floor	100, 000

LANDSCAPING

General

The program for the landscaping of major thoroughfares and other civic improvements, especially those possessing potential as tourist attractions, was initiated during the fiscal year and was expected to be well under way by the end of 1959.

Descriptions of the most notable of the land scaping projects follow:

Portola Drive

The landscaping of Portola Drive between Twin Peaks Boulevard and Sloat Boulevard, for which plans and specifications had been prepared during the fiscal year, was expected to commence in July 1959 and to be completed in early 1960.

The estimated contract cost was $61,000.

Market Street

With the completion of the work of widening Market Street from Hattie Street to Portola Drive, plans and specifications for the landscaping of that portion of Market Street were in progress at the end of the fiscal year. It was planned to award the contract at such time that the actual commencement of the work would coincide with the completion of the landscaping of Portola Drive. The estimated contract cost was $35,000.

Geary Boulevard

Plans and specifications for the landscaping of Geary Boulevard between Masonic Avenue and Thirty-third Avenue were completed during the fiscal year and submitted to the Geary Merchants Association for its comments prior to advertising for bids. Work was expected to commence in the fall of 1959 at an estimated contract cost of $19,000.

Christmas Tree Point

Plans and specifications for the park-type development of the Christmas Tree Point area on Twin Peaks were completed during the fiscal year. Advertising for bids for the work awaited appropriation of funds to cover the maintenance provisions of the contract. The estimated contract cost was $30,000.

Jackson Square

Plans and specifications for a second contract to complete the planting of trees in the vicinity of Jackson Square, an area including the Federal Customs and Appraisers Buildings, were prepared during the fiscal year and it is expected the work will soon be under way.

Upon completion of this contract, a total of 84 trees will have been planted under the two contracts at an estimated cost of $3,800.

Mansell Street

The widening of Mansell Street between San Bruno Avenue and McLaren Park, a major thoroughfare into the scenic park area, was expected to commence in late 1959 and be completed in the summer of 1960. It is planned that landscaping of the widened portion of Mansell Street will be started immediately upon completion of the street work. The preliminary estimate for the contract cost of the landscaping, including an irrigation system is $99,000.

GARBAGE DISPOSAL

General

As has been the case since 1932, all garbage and refuse collected in San Francisco has been disposed of by the sanitary fill method in the tidal flats of San Francisco Bay. Two licensed scavenger companies make the collections which are delivered to the disposal site operated through the jointly finance Sanitary Fill Company. The City controls collection rates and enforces public health regulations.

Collection and Disposal

Unsegregated garbage and refuse is picked up in the residential districts once a week. In the downtown districts, where large amounts of paper and garbage accumulate, general collections are made three times a week and at large hotels, restaurants, etc., collections are made daily. The collectors salvage paper, rags, bottles, and other revenue items enroute and, prior to weighing the garbage designated for the fill, at the sorting shed. Although the refuse trucks have a capacity of about 20 cubic yards the average volume of garbage and refuse incorporated in the fill from each truckload is approximately 18 cubic yards.

The scavenger companies collect garbage and refuse six days a week or about 312 days a year. The Sanitary Fill Company operates 5-1/2 days a week from 4:30 a.m. to 3:00 p.m. daily except on Saturday. Dumping is stopped at 11:00 a.m. on Saturday since collections are about 40 percent less than on a normal week day.

TABLE IV
GARBAGE COLLECTION AND DISPOSAL STATISTICS
Calendar Years 1957 and 1958

GARBAGE COLLECTION	1957	1958
Trucks used, average	164	169
Trips per day	267	293
PAPER COLLECTION		
Flat-bed trucks used	31	Not available
Amount collected, tons	Not available	Not available
Amount salvaged, tons	Not available	Not available
Amount dumped, tons	31,560	13,308
INCOME OF SANITARY FILL CO.	$297,766.05	$318,269.69
FILL AND COVER EXPENSE		
Operations	$235,605.17	$274,170.64
Road Maintenance	6,292.38	12,510.00
Administration, Inspection and Legal	52,511.92	60,201.52
Total Expense	$294,409.47	$346,882.16
GARBAGE AND REFUSE HANDLED		
City of San Francisco tons	256,395.65	276,756.25
Other sources, tons	2,531.24	427.47
Total Tons	258,926.89	277,183.72
Quantity per day, tons (312 days)	852	889
Cost of disposal per ton	$1.105	$1.249

	1957	1958
COVER MATERIAL		
Quantity used, cu. yd.	225,170	267,010
Total Cost	$129,756.00	$160,236.71
Cost per cu. yd.	$0.576	$0.60
Cover per ton of garbage and refuse cu.yd.	.87	.93
Total Truck loads of garbage and refuse	87,819	91,271
Average weight per load, tons	3.24	3.02
Estimated average weight of garbage per cu. yd., pounds	361	336

NOTE: This table is compiled from information obtained from the contractor for the Sanitary Fill Company. It does not reflect administrative or overhead expenses of the Sanitary Fill Company.

SANITARY FILL DISPOSAL SITE

The sanitary fill disposal site is located on Southern Pacific Company property, adjoining that company's Bayshore switching yards, just south of the San Francisco-San Mateo County line. The disposal site lies along approximately 6,400 feet of shoreline, upon which the filling of 250 acres has been completed. Earth materials used to cover the garbage and refuse are excavated and hauled from an area conveniently located at the north end of the fill site. An area of approximately 30 acres of the aforementioned 250 acres of completed fill area is currently being used by light industrial firms.

FILL AND COVER OPERATIONS

The Sanitary Fill Company conducts the fill and cover operations through a subcontractor.

The fill and cover method of disposal is essentially a daily garbage and refuse fill with an earth seal creating separate cells within the entire fill of materials deposited daily. Sandy clay, which forms an excellent seal around the garbage, as well as rock which is necessary for access roads during wet weather operations is available in the immediate vicinity. The combined compaction of the garbage fill and the underlying Bay mud generally allows for many separate fills, each approximately 20 to 25 feet thick, one on top of the other.

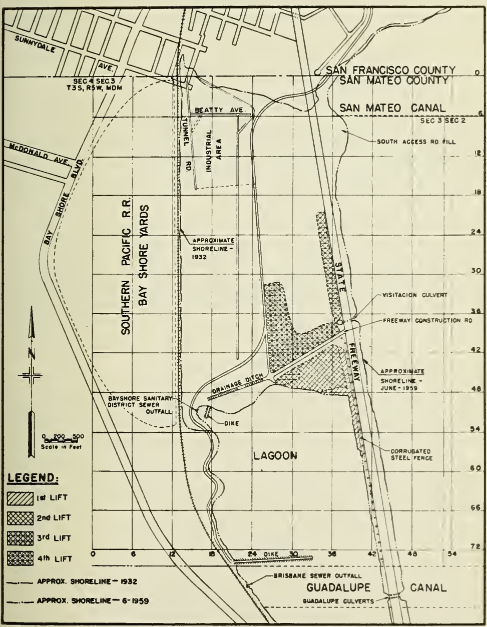


FIG. 11
GARBAGE DISPOSAL SITE

BURNING BANNED

The burning of combustible materials such as unsalvageable paper, waste boxes and quarantined garbage, has been eliminated in accordance with the ban on open burning by the Air Pollution Control District.

ODORS ALONG THE FREEWAY

In July 1957 the section of Bayshore Freeway just south of the San Francisco-San Mateo County Line was opened to traffic. In April 1958, the Sanitary Fill Company completed their last lift on dry land, and commenced filling operations in the lagoon to the south which was formed by the freeway embankment east of the dump site (See Fig. 11). The introduction of the garbage into the salt water of the lagoon caused rapid decomposition of the garbage, generating hydrogen sulfide gas which has an odor similar to "rotten eggs". In addition, there are two jurisdictions in San Mateo County which discharge raw sewage into the lagoon, thus intensifying the production of odors. The prevailing wind in this area is from the west and within a few weeks the "rotten-egg" odor was noticeable on the Freeway. Numerous complaints were received by the City and the condition received considerable unfavorable comment in the press.

PROHIBITION OF ORGANIC DEPOSITS

During the first few months of the fiscal year, meetings were held by the City with the Sanitary Fill Company, Southern Pacific Company, Regional Water Pollution Control Board and San Mateo County. On August 4, 1958, the Sanitary Fill Company voluntarily ceased to deposit garbage in the bay waters, which action was followed on August 21 by a resolution of the Water Pollution Control Board prohibiting the depositing of organic matter in locations where it would contact bay water at any tide level.

SANITARY FILL AREAS INCREASED

The Sanitary Fill Company subsequently received permission from the State Division of Highways to dispose of garbage and refuse by the fill and cover method on certain designated state property west of Bayshore Freeway, and shortly thereafter awarded a contract for the construction of additional fencing to their corrugated steel boundary fence so as to include the area of their easterly encroachment onto such state property. In the following November, the Southern Pacific Company informed the City that they would object to any sanitary fill operations east of the Freeway.

DRAINAGE DITCH AND DIKE

Following a series of meetings held between January and April 1959, it was decided that the Bayshore Sanitary District would retain the sanitary fill subcontractor to construct and maintain a drainage ditch from the terminus of the existing 8-foot diameter sewer at the northwest end of the lagoon to the westerly end of the Visitacion culvert, and also to construct an earth-filled dike across the lagoon at approximately the north boundary of Guadalupe Canal. The Southern Pacific Company at that time agreed to design the drainage ditch, which was to be located with its easterly half in solid fill and the westerly half in the garbage and refuse fill. Thereafter, the Sanitary Fill Company was absolved by the Bayshore Sanitary District of responsibility for any nuisance that might result from the ditch, was issued a fixed fee dumping permit from that District, and was assured by the City of an extension of their franchise.

CONCLUSION

Just prior to the end of the fiscal year, the corrugated steel fence was completed, construction of the ditch and dike was started, and an ordinance was being prepared to extend the Sanitary Fill Company disposal franchise for an 8-year period starting January 1960.

LABORATORY AND TESTING

The testing laboratory was operated as a unit of the Construction Division of The Bureau of Engineering.

The activities of this section include the inspection and testing of materials furnished by contractors and bidders on various contracts for the Department of Public Works, the Purchaser of Supplies and the Public Utilities Commission. In addition tests were conducted for the Fire Department and the Recreation and Park Department. The above included many visual analyses and suggestions.

CONCRETE

All concrete, concrete aggregates, sand and cement furnished on all City contracts are checked and tested. Routine inspection and tests are made at plants furnishing premixed concrete.

All concrete samples are tested at seven and twenty-eight days, and the results are usually well above the requirements of the specifications. Under special circumstances extra samples are tested at other than the standard seven or twenty-eight days to check attained strength.

The use of two percent calcium chloride, to accelerate the setting time of concrete, was used on all pavement and parking strip concrete to speed up the use of the pavement for movement of traffic.

ASPHALT

All of the local asphalt plants have either discontinued the use, or only use small amounts, of Antioch sand to blend with other types of sand which results in a more stable and satisfactory mix yielding a better type of asphalt pavement surface.

MISCELLANEOUS

Samples of cast iron, wrought iron, steel, brass and bronze, used on City projects, were tested for physical and chemical properties. Canned fruits and vegetables, soaps and detergents, lubricating oils and greases were checked and tested for the Purchaser of Supplies.

At the request of the Fire Marshal several fire proofing compounds, insecticides and other types of sprays were checked for inflammable characteristics and fire hazard. As a result of these investigations several commercial products have been prohibited from use in San Francisco.

SUMMARY

A summary of the tests performed in this laboratory during the year for the various departments, together with corresponding figures for the previous year, are shown in the following table.

	1957-58		1958-59	
CHEMICAL AND PHYSICAL TESTS				
Public Utilities Commission	10		20	
Department of Public Works	75		50	
Purchaser of Supplies	160		125	
San Francisco Fire Department	25		20	
Recreation and Park Department	5		12	
Bureau of Architecture	120		220	
Bureau of Engineering	25	420	125	572

	1957-58		1958-59	
ASPHALT AND COAL TAR TESTS				
Corporation Trenches	4		5	
Public Utilities Commission	12		10	
Recreation and Park Department	0		0	
Department of Public Works	80		30	
Bureau of Engineering	60	156	60	105
CONCRETE				
Bureau of Architecture	453		526	
Public Utilities Commission	52		153	
Bureau of Engineering	389	894	472	1151
TOTAL		1470		1828

SUPERVISORY PERSONNEL
As of June 30, 1959

Division, Section and Unit	Person in Charge
DIVISION OF STREETS AND HIGHWAYS	Vacant, Asst. City Engineer
Street Improvement Section	E. J. Sierra, Engineer
Highway Section	W. C. Ewing, Engineer
Street Reconstruction	A. Goldberg, Engineer
DIVISION OF DESIGN	R. C. Levy, Senior Engineer
Administrative Section	G. Galli, Engineer
Structural Investigation Section	N. F. Yde, Engineer
Structural Design Section	R. G. Lee, Engineer
Sewer Section	R. F. Lauenstein, Engineer
Sanitary and Special Projects	A. O. Friedland, Engineer
Mechanical Section	D. Matlock, Engineer
Electrical Section	A. E. Tanner, Engineer
Utilities and Estimates	S. C. Gerughty, Engineer
Specifications	J. Lee, Asst. Engineer
DIVISION OF TRAFFIC ENGINEERING	R. T. Shoaf, Engineer
SURVEYS AND MAPPING SECTION	H. G. Louie, Engineer
CONSTRUCTION DIVISION	J. D. Roberts, Sr. Engineer
CONTRACT ADMINISTRATION DIVISION	F. Giusto, Asst. Engineer

RETIREMENTS AND DEATHS

The Bureau lost the services of the following valued employees during the year:

E. B. Main	Resigned	7-15-58	Draftsman	14 years
C. S. Gerisch	Deceased	8-18-58	Stenographer	2 years
W. B. Hall	Retired	11-1-58	Draftsman	30 years
C. S. Hiden	Retired	12-5-58	Asst. Engineer	33 years
C. S. Begley	Deceased	2-21-59	Stenographer	17 years

PERSONNEL AT BEGINNING AND END OF FISCAL YEAR

Division	July 1, 1958	June 30, 1959	Change
Design and Administrative	126	119	-7
Construction (Field)	32	27	-5
Surveys and Mapping (Field and Office)	36	39	+3
Traffic Engineering	24	24	
General Clerical Staff	22	19	-3
TOTALS	240	228	-12

PAYROLL

The following tabulation shows the number of employees and total payroll charged to General and Project Funds:

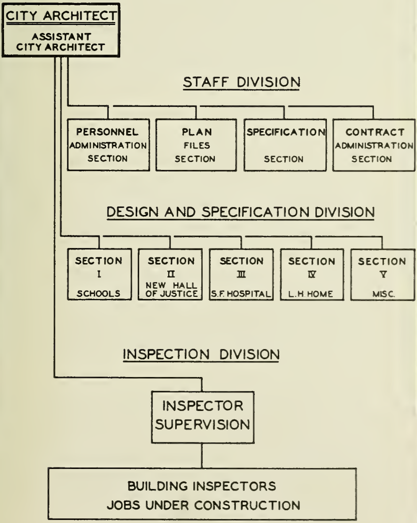
Source of Payroll Funds	Employees End of Year	Payroll 1958-1959
General Fund (Budget Payroll)	59	$ 453,781
Project Funds—Gas Tax, Bonds, etc. (Interdepartmental Payroll)	169	1,284,197
TOTALS	228	$1,737,978

BUREAU OF ARCHITECTURE

DEPARTMENT OF PUBLIC WORKS

ORGANIZATION CHART

JUNE 30, 1959


CITY ARCHITECT
ASSISTANT CITY ARCHITECT
STAFF DIVISION
PERSONNEL ADMINISTRATION SECTION
PLAN FILES SECTION
SPECIFICATION SECTION
CONTRACT ADMINISTRATION SECTION
DESIGN AND SPECIFICATION DIVISION
SECTION I SCHOOLS
SECTION II NEW HALL OF JUSTICE
SECTION III S.F. HOSPITAL
SECTION IV L.H. HOME
SECTION V MISC.
INSPECTION DIVISION
INSPECTOR SUPERVISION
BUILDING INSPECTORS JOBS UNDER CONSTRUCTION

BUREAU OF ARCHITECTURE

Charles W. Griffith—City Architect

FUNCTIONS

The Bureau of Architecture is concerned with all new and existing City Buildings with exception of those under the jurisdiction of the Public Utilities Commission and the Recreation and Park Department. The Bureau is charged with responsibility for the design and construction of new City buildings and the modernization, remodeling, and such maintenance projects of existing City buildings as may require plans and specifications, or which exceed $2,000.00 in cost. The activities of the Bureau are divided into two separate but related functions: (1) the preparation of estimates, drawings, and specifications, and (2) the supervision of construction.

Consulting architectural and engineering firms are usually commissioned to design and prepare the working drawings and specifications for new civic buildings, under the direction of the Bureau. The Bureau assists the Department for which the construction is proposed, or client agency, in the preparation of the design program, arranges and participates in the many conferences necessary between the architects and the Department, reviews the drawings and specifications, checks all cost estimates closely, and certifies the proper completion of the architectural work through the various stages. The Bureau also coordinates and programs the work of the consultants to insure the completion of the drawings and specifications to comply with required construction schedules. When the drawings and specifications are properly completed, the Bureau prepares all necessary forms and data so that bids may be requested and received by the Director of Public Works, and upon award of contract, supervises the construction thru completion and acceptance.

Drawings, estimates, and specifications for modernization, remodeling, and repair projects, are normally prepared by architects and draftsmen of the Bureau, since this procedure is more practical and economical. This is also done with some new buildings such as the Log Cabin Ranch buildings wherever it is feasible to do so. Regardless of the manner in which the drawings and specifications are prepared, this Bureau supervises the construction thru completion and acceptance of the work.

The work of this Bureau has been steadily increasing, and on July 1, 1959 the entire work load was as follows:

1. Proposed Bond Issues (prel. data prepared) (3)	$34,915,000.00
2. Preliminary Design Stage (94 jobs)	11,074,800.00
3. Working Drawing Stage (53 jobs)	16,649,330.00
4. Under Construction (82 jobs)	23,338,972.00
5. Contracts Completed, fiscal year 1958-1959 (124 jobs)	8,568,119.00
Total (356 jobs)	$94,546,221.00

This compares with a total work load of 278 jobs and $71,200,000.00 as of July 1, 1958. One significant increase in the work load was brought about by the Board of Education's decision to obtain bids on all jobs estimated to cost in excess of $500.00. Formerly bids had been received only on jobs costing in excess of $2,000.00 and these smaller jobs were not supervised by the Bureau. The Board's decision added a considerable work load to both our office and field sections.

ORGANIZATION

The Organization Chart Indicates in a very brief manner the breakdown of divisions which have been found efficient in handling the Bureau's work. The City Architect and Assistant City Architect are indicated in one block at the head of the Bureau. There is a further breakdown of responsibilities between the two as follows:

1. The City Architect directs the design of the School construction program, Hospital, Miscellaneous work, Captal Improvement program, the construction inspection forces, and assignment of personnel.
2. The Assistant City Architect directs the Laguna Honda program, Hall of Justice program, and special architectural and engineering surveys.
3. Both the City Architect and the Assistant City Architect maintain sufficient familiarity with the other's work so that no delay in the various programs result when either is away from the office on vacation or for other reasons.

The organization of the Bureau of Architecture is further broken into three separate and distinct functions: Staff Work, Design and Specification Work, and Inspection. These functions are as follows:

STAFF DIVISION

Section I - Personnel

This section is responsible for fiscal arrangements and work orders for both architectural and related engineering services.

Section II - Plan Files

This section is responsible for requisition and procurement of blueprints, assembly of blueprints, specifications, and bid forms, the storage of tracings, blueprints and specifications, and related work.

Section III - Specifications

This section is responsible for specification standards, the coordination and accuracy of the general conditions affecting the contract, and the mechanics of editing, checking, mimeographing and assembly of the specifications.

Section IV - Contract Administration

This section is responsible for the coordination of jobs under construction. All correspondence, shop drawings, reports, etc., concerning jobs under construction and completed work clear through this section.

DESIGN DIVISION

The responsibility for processing the various jobs from the initial inception through to the completion of the final drawings and specifications has been broken down into five separate sections. Each of these sections is headed by an architect who not only maintains formal and informal relationships with the client agency, but also supervises the draftsmen assigned to him for the preparation of drawings and specifications. The five sections are:

Section I - School Work

Section II - New Hall of Justice

Section III - San Francisco Hospital

Section IV - Laguna Honda Work

Section V - Miscellaneous Work

Miscellaneous work includes all work which does not fall under the general categories listed as Sections I, II, III, and IV.

INSPECTION DIVISION

The Bureau supervises and inspects all building construction, whether it has been designed by private architects or by Bureau personnel. The responsibilities of the Inspection Division include progress and validity of the construction work, contract payments, and certification of completion of contract. The number of jobs under construction is 82, and the amount of work is $23,338,972.00.

The Inspection Division is headed by two Supervising Construction Inspectors and one Building Inspector who is assigned supervisory duties for the present. The twenty-seven building inspectors are broken down into two groups of 10 and one of seven, which are supervised by the three mentioned above.

A secondary responsibility of the Inspection Division is concerned with the jobs completed throughout the previous fiscal year. The amount of work which will be done on these completed jobs is indeterminate, but in certain cases will be considerable. A thorough inspection must be made of each job at the end of the year bonded guarantee period, one year after acceptance of the job, and any defect found, which is the result of faulty materials or workmanship, must be corrected by the Contractor. A situation often develops in which much correspondence and many conferences are involved when such defective work is discovered, and considerable time is always taken in the proper disposition of such cases.

BOND ISSUES

The greatest amount of the Bureau's work load at present is processing work for which bonds have been voted. The bond issue work is as follows:

I 1948 School Bond Issue: $48,890,000.00

This bond issue was voted in November of 1948 and construction started on the first major school project early in 1950. The huge building program continued without interruption throughout the three years of the Korean War, which created many serious material and labor shortages. It is now completed and the final accounting is given below:

1.	26 Elementary Schools:	$21,573,264.00
2.	4 Junior High Schools:	10,530,225.00
3.	2 Senior High Schools:	3,979,484.00
4.	2 City College buildings:	3,332,767.00
5.	1 Vocational School:	1,697,997.00
6.	Misc. Remodeling work:	$ 4,825,000.00
7.	Equipment:	2,100,000.00
8.	Administrative Expense:	175,000.00
9.	Sunset Community Center:	219,741.00
10.	Land:	995,301.00
11.	Balance	317,711.00
	Total	$49,746,490.00

Subsidy Federal -	$540,000.00	
Property sale	316,490.00	
Subtotal (subtract)		- 856,490.00
Total Bond Funds		$48,890,000.00

II 1952 Fire Department Bond Issue: $ 4,750,000.00

The construction work of this Bond Issue progressed favorably during the past fiscal year. One new firehouse, Engine House No. 21, Grove and Baker Streets, was completed, one new firehouse, Engine House No. 15, 2153 California Street, is under construction, and one additional new firehouse, Engine House No. 15, Oak Street near Franklin Street, is scheduled for advertising in August 1959. The program is divided into two general parts: (1) the reconstruction of existing firehouses, wherever such reconstruction is practicable and economical, and (2) the construction of new firehouses to replace those which must be abandoned because it is not economical nor feasible to complete a reconstruction program which would make them structurally safe. The construction of new firehouses has been delayed considerably, however, by factors over which this Bureau has no control. The acquisition of sites for the new firehouses has caused the greatest delay as it usually requires a period of a year or more to secure the site after a definite location has been determined. No design work on a new firehouse can be done prior to final acquisition of a site. It is therefore obvious that a period of approximately two years is required between selection of site and actual construction of a new firehouse. The status of this bond program as of July 1, 1959 is as follows:

A. Construction Completed (88%)

New Firehouses

Engine No.	Location	Amount
4	676 Howard Street	$ 195,641.33
*10	19th and Folsom Sts.	576,869.00
11	Shafter and Ingalls Sts.	223,114.36
12	Drumm and Commercial Sts.	486,717.72
13	26th near Church St.	262,294.21
26	Presidio and Euclid Aves.	296,482.28
34	Turk and Webster Sts.	225,999.43
38	Ocean and Phelan Aves.	264,700.00
40	Stanyan and Grattan Sts.	248,672.13
41	1325 Leavenworth St.	169,458.86
45	45th Ave. near Irving St.	159,129.16
21	Grove St. near Baker St.	182,511.00
	Subtotal	$3,291,589.48

* $128,837.00 from Bond Funds and $448,032.00 from Budget appropriations.

Reconstruction of Existing Firehouses

Engine No.	Location	Amount
5	1340 Powell St.	$ 117,410.57
6	356 - 7th St.	122,297.00
20	2239 Greenwich St.	136,977.39
25	3rd and Arthur Sts.	22,122.36
33	117 Broad St.	4,198.21
36	551 - 26th Ave.	19,931.51
39	1091 Portola Dr.	84,325.01
46	441 - 12th Ave.	70,996.32
47	499 - 41st Ave.	56,072.90
49	2155 - 18th Ave.	28,914.16
24	100 Hoffman St.	15,691.96
	Subtotal	$ 678,937.39

Total number of projects: 23

Total construction cost: $3,970,526.87

B. Under Construction (7%)

Engine No.	Location	Amount	Type
15	2150 Calif. St.	$321,500.00	New Firehouse
	Subtotal	$321,500.00	

C. Design Stage (5%)

Engine No.	Location	Amount	Schedule for Advertising
14	Oak nr. Franklin	$220,000.00	Sept. 2, 1959
	Subtotal	$220,000.00	

D. Resumé

Total number of projects:	25
Total construction cost:	$4,512,026.87

E. Projects Deferred Indefinitely

Engine No.	Locations
3	1067 Post Street
8	1648 Pacific Avenue
16	909 Tennessee Street
17	416 Jessie Street
18	Wilde Ave. & Girard Street
19	4th & Merrimac Street
28	1814 Stockton Street
48	20th & Wisconsin Streets

There are 12 projects for which financing has not yet been completed. These are estimated as follows:

7 houses (reconstruction)	$ 350,000.00
4 houses (new)	800,000.00
Property costs (estimated)	100,000.00
Total	$1,250,000.00

In addition to the above work, the Bureau completed preliminary studies for a new Fire Department Headquarters building estimated at $400,000.00, and expansion to the Training Facility located at 18th and Folsom Streets, estimated at $200,000.00, during the fiscal year.

III 1954 Laguna Honda Bond Issue: $ 5,475,000.00

The drawings, specifications, design and construction work of this Bond Issue progressed rapidly during the past fiscal year. As of July 1, 1958 all work was completed, under construction, or scheduled for construction within the next few months. It is apparent that all work will be completed within fiscal year 1958-1959, and the status of the jobs is given below:

Status	No. of Project	Amount	Percentage
1. Completed	14	$4,592,988.90	88%
2. Under construction	2	582,011.10	12%
Subtotals	16	$5,175,000.00	100%
Equipment		300,000.00	
	Total	$5,475,000.00	

In addition to the bond work at Laguna Honda Home, four deferred maintenance jobs, in total amount of $404, 309, 90, were completed during the fiscal year, and one deferred maintenance job in the amount of $56, 894.00 was under construction.

This bond issue modernization work has progressed remarkably considering the many difficulties encountered. The first and most formidable obstacle was that the institution had to remain occupied. Fortunately, the appropriation included the modernization of Clarendon Hall, a building which had been abandoned and was not occupied The first job was the rehabilitation of this building which provided space to move occupants in the subsequent work of the other buildings.

It should also be noted that the work has been expertly programmed and directed by Mr. Devitt who gave his personal attention to this Bond Issue, particularly in the early stages. Mr. Moran, Superintendent of the institution, has been most helpful and cooperative in expediting the work.

One job, in addition to the bond and deferred maintenance work, the rehabilitation of the Old Male Attendants Quarters, has developed. This project is being prepared for capital improvement financing.

The deferred maintenance work which will be processed next year is as follows:

1.	Rehabilitation, Building L	$280,000.00
2.	Repairs, Cafeteria	4,000.00
3.	Repairs, Incinerator	4,500.00
4.	Repairs, Garage	8,000.00
5.	Repairs, Chapel	16,000.00
6.	Repairs, Elevators	28,000.00
	Total	$340,500.00

IV 1954 San Francisco Hospital Bond Issue: $5,830,000.00

The design and construction of this Bond Issue and related deferred maintenance work, progressed favorably during the fiscal year, but it is now evident that all jobs requested by the Hospital cannot be financed with funds available. The record of the various jobs is given below. Percentages are based on construction costs and estimated costs of jobs as shown, and the financing is from Bond Funds, Deferred Maintenance Funds, and Capital Improvement funds.

SAN FRANCISCO HOSPITAL
Status, July 11, 1958

(Based on reappropriation of 18 June 1956)

A. Projects completed July 1, 1956 thru July 1, 1958 (50%)

	Job No.	Description	Const. Cost
1.	1335	Main Kitchen Dishwashing	$ 17,355.00
2.	1352	Elevators & Stair Enclosure (TB Bldg.)	104,406.00
3.	1366	Exit Stairways	131,316.00
4.	1382	Elevator Modernization (Wards 10-20-40)	62,372.00
5.	1384	New Incinerator	14,995.00
6.	1385	Garbage Can Washing Facilities	3,972.00
7.	1387	Salvageable Refuse Storage	3,777.00
8.	1406	Bakery & Vegetable Prep. Room	62,007.00
9.	1409	Elevator Modernization (Ward 30)	24,912.55
10.	1439	Ventilating System	2,222.00
11.	1458	Laundry Roofing	4,744.00
12.	1473	X-Ray Developing Room	11,089.00
13.	1489	Roofing - Morgue Building	8,333.00
14.	1475	Weatherproofing	9,849.91
15.	1500	T.B. Modernization	419,221.81
16.	1437	Elevator Maternity Bldg.	61,346.00
17.	1563	Roofing Receiving Bldg.	2,791.00
18.	1381	Admitting Ward & Social Service	276,894.02

19.	1444	Special Diet Laboratory	31,729.00
20.	1481	Elevator #90-A Modernization Bldg. 90	6,497.00
21.	1480R	Elevator #90-B Modernization Bldg. 90	4,289.24
22.	1421R	Exit Stairs Bldg. 80	91,606.17
23.	1425	Maternity Bldg.	820,887.10
24.	1438	Cold Storage Facilities	37,200.00
25.	1707	Curtain Cubicles & Track Installation	1,145.00
26.	1701	Nurses' Call System	9,888.00
27.	1684	Corridor Doors - Maternity Bldg.	1,975.00
28.	1569	Passenger Elevator (new)	32,317.00
29.	1570	Lockers - Dressing Rooms	329,066.26
30.	1611	Cobalt Therapy Unit	35,865.51
31.	1652	Roofing & Parapets	32,387.00
32.	1521	Modernization - Bldg. 50	476,578.97
		Subtotal	$3,133,034.54

B. Projects Under Construction (24%)

	Job No.	Description	Const. Cost
33.	1591	Corridors - Wards 30-40	$287,420.00
34.	1592	Elevator - Wards 30-40	35,531.00
35.	1590	Ward 40	455,753.00
36.	1735	New Main Electric Service	31,935.00
37.	1696	Consolidated Laboratories	558,563.00
38.	1691	Recreation Area	7,940.00
39.	1671	New Elevator (Isolation)	78,589.00
		Subtotal	$1,455,731.00

C. Projects Scheduled for Construction this Fiscal Year (26%)

	Job Description	Adver. Date	Amount
40.	Project III Modernization of Ward Bldg. 10	July 22, 1957	$700,000.00
41.	Project III Connecting Corridors Ward Bldgs. 10-20	July 22, 1959	300,000.00
42.	Project III New Elevator Ward Bldgs. 10-20	July 22, 1959	50,000.00
43.	Project V Modernization of Ward Bldg. 60	Jan. 6, 1960	600,000.00
		Subtotal	$1,650,000.00

D. Projects (not scheduled for this fiscal year)

	Job Description	Amount
44.	Ward Bldg. 20 Modernization	$ 500,000.00
45.	Ward Bldg. 30 Modernization	500,000.00
46.	New Turbo-Generator Revisions to Service Wiring	180,000.00
47.	Elevator Modernization	223,500.00
48.	Psychiatry Bldg. 90 Modernization	600,000.00
	Subtotal	$2,003,500.00

NOTE: Financing other than 1954 San Francisco Bond Issue will have to be secured for projects 44 thru 48.

E. Bond Funds Available May 15, 1959

1.	Miscellaneous	$ 140,608.98
2.	Extras and Contingencies	259,551.35
3.	Equipment	265,247.31
4.	Project II	134,370.84
5.	Project III	1,140,893.91
6.	Project IV	52,031.56
	Total	$1,992,703.95

F. Resumé

The Hospital modernization program has progressed favorably but in a step by step manner. The entire institution is occupied, and elaborate procedures must be used in order to insure that the construction work will not interrupt Hospital procedures. The work will continue to progress in a step by step manner as required by the Hospital Superintendent.

It is obvious from the above report that all of the work necessary at the Hospital cannot be financed from the remaining bond funds and the deferred maintenance appropriations. As requested by the Chief Administrative Officer, the Bureau is now preparing a complete estimate of all work required at the Hospital so that proper financing can be arranged. This report will be completed after receipt of bids for modernization of Ward Bldg. 10, Connecting Corridors between Wards 10 and 20, and New Elevator, early in September 1959.

V 1954 Civic Center Exhibit Hall Bond Fund: $3,275,000.00

(Civic Plaza Garage: Estimate cost: $3,350,000)
(Civic Plaza: Estimate cost: 433,000)

The Civic Center Exhibit Hall under the south half of the Civic Center Plaza, officially named Brooks Hall, was completed and occupied by the first convention and exhibit on April 11, 1958. The final construction cost, including required corrective and alteration work to sewers and streets, was $3,665,736.68.

The construction of the Civic Plaza Garage under the north half of the Plaza, at an estimated construction cost of approximately $3,350,000.00, was progressing favorably at the end of the fiscal year. Considerable coordination has been required between this project and Brooks Hall since they will be joined by stairs and ramps under the east side of the Plaza. A great amount of coordination is also being required between the construction of the Civic Plaza Garage and the construction of the Civic Center Plaza.

The construction of the Civic Center Plaza, estimated total cost $433,000.00, which will restore the Plaza surface to a new approved design, has been re-scheduled to start November 16, 1959 in lieu of February 1960 because of the favorable progress of the Plaza Garage construction. The restored Plaza is scheduled for completion and use in September of 1960.

A fourth project, Decorative Treatment of the Plaza Fountains, which will be a competition conducted by the Art Commission and which is tentatively estimated at $250,000.00, will be processed separately. No funds are currently available for this fourth project.

The Bureau of Conventions and Visitors and the exhibiting organizations have been pleased with the operation of the Exhibit Hall. However, Phase II of the Development of Convention Facilities, the modernization of the Civic Convention Hall, is now considered urgent, and the Bureau has prepared data for this required work which is described farther on in this report.

VI 1956 School Bond Issue - Status, July 1, 1959 $27,000,000.00

The design and construction work of this Bond Issue, approved by the election of November 1956, progressed favorably during the past fiscal year. As of July 1, 1959 the various projects were in the following status:

	Proj. No.	Name		Amount
I	Construction Completed (2-1/2%)			
1.	135	Starr King School		$ 285,200.00
2.	105	John O'Connell H.S.		266,046.00
3.	119	Balboa H.S.		26,400.00
4.	121	H. Mann Jr. H.S.		88,712.00
			Subtotal	$ 666,358.00
II	Under Construction (20.5%)			
5.	125	Silver Ave. Jr. H.S.		$1,035,542.00
6.	124	G. Washington H.S.		107,612.00
7.	150	Polytechnic H.S. (Basement)		35,374.00
8.	123	Portola Jr. H.S.		463,500.00
9.	150	Polytechnic H.S. (Kitchen)		96,557.00
10.	132	Longfellow School		844,000.00
11.	120	Francisco Jr. H.S.		578,000.00
12.	101	City College		2,245,600.00
			Subtotal	$5,406,185.00
III	Drawings and Specifications under Preparation (55%)			
13.	119	Lincoln H.S.		300,000.00
14.	122	Denman Jr. H.S.		397,000.00
15.	113	S.E. High School		4,200,000.00
16.	114	S.W. High School		4,200,000.00
17.	132	J. Ortega School		400,000.00
18.	130	Clarendon School		880,000.00
19.	131	Golden Gate School		695,698.00
20.	124	Roosevelt Jr. H.S.		315,000.00
21.	(none)	Reconstruction		3,500,000.00
			Subtotal	$14,887,698.00
IV	Equipment (5-1/2%)			$ 1,500,000.00
V	Contingencies (12%)			$ 3,329,759.00
VI	Unallocated (4-1/2%)			$ 1,210,000.00
		TOTAL $27,000,000.00		

From the above report it is obvious that excellent progress has been made on this Bond issue and that, barring unforeseen circumstances, all bond jobs will be completed within the money available. Actually, savings were made in Bond projects during the past year since several projects were awarded for sums less than the estimated construction costs.

In addition to the Bond projects, the Jefferson School, destroyed by fire during the year, was in design stage at an estimated cost of $800,000.00. This school is scheduled for completion and occupancy in February 1961 and is being financed from District funds and the fire loss insurance settlement. Another project, also to be financed from District funds, is the remodeling of the Administration Building, estimated to cost $1,200,000.00, for which a preliminary estimate has been prepared.

VII 1956 Hall of Justice Bond Issue $19,475,000.00

Construction of the foundation of this structure, in the amount of $931,967.44, began on May 15, 1958, six and one-half months ahead of schedule, and was completed during this fiscal year. Contracts were awarded for the construction of the Main Building on November 19, 1958 as follows:

1.	General Construction, Plumbing, Mechanical and Electrical Work	$13,508,500.00
2.	Elevators	465,888.00
3.	Topsoil, Finish Grading and Planting	30,500.00
	Total	$14,004,888.00

Construction of the Main Building began January 5, 1959 and was scheduled for completion, barring unforeseen delays, over which the contractor has no control, on January 24, 1961. The final construction contract, the construction of a Service Station, estimated cost $176,000.00, is scheduled to start during this fiscal year, and for completion prior to the completion of the Hall of Justice. As of the start of this fiscal year, July 1, 1959, the status of the construction work on this bond issue was therefore as follows:

	Amount	Percentage
A. 1 Construction contract completed	$ 931,967.44	(6%)
B. 3 Contracts under construction	14,004,888.00	(93%)
C. 1 Construction contract scheduled	176,000.00	(1%)
Total	$15,112,855.44	(100%)

However, three additions to the construction were under consideration, and since they have been approved by the Finance Committee of the Board of Supervisors (July 1, 1959, and by

Board on July 6, 1959), it appeared that they would be definitely added to the job. These additions were as follows:

A. At the urgent request of the Sheriff for more jail space, an addition to the 7th Floor of approximately 6200 square feet to accommodate 64 additional inmates, is contemplated. The additional cost is estimated at $315,000.00. This increase in capacity would provide that the Sheriff's department could take care of 378 male and 59 female prisoners or a total of 437 prisoners.

B. The second item is for sculpture and a mural in the Main Lobby at a cost of $22,000.00. This was requested by the Art Commission which approved the drawings with the understanding that this adornment would be provided if sufficient funds were available.

C. The third item is the increase in the height of the marble wainscoting in the corridors, from 2'4" to 7'0". The lesser height was specified because our estimate indicated there would be insufficient funds for the greater height. The reduction in future maintenance costs of the walls, in cleaning and painting, justifies this item if a reasonable cost can be negotiated. The estimated cost: $48,000.00.

Description of the Building:

Seven story and ground floor concrete structure with marble facing, and with an adjacent one story and roof deck parking structure, bounded by Seventh, Harriet, Bryant, and Harrison Streets.

Total Gross Square Foot Area is	571,145 sq. ft.
Parking (2 decks)	131,452 sq. ft.
Total Cubage	9,650,000 cu. ft.
Public Parking	131,000 sq. ft.

The building will provide space for the following City and County of San Francisco Departments and related facilities:

Roof	Heliport, Microwave Tower
Seventh Floor	County Jail
Sixth Floor	City Jail
Fifth Floor	Police Department
Fourth Floor	Police Department
Third Floor	Superior Criminal Courts, District Attorney, and allied departments

Second Floor	Municipal Criminal Courts, Adult Probation, and allied departments
First Floor	Municipal Traffic Courts, Traffic Fines Bureau, Police Traffic Bureau, Coroner's Department in adjacent one-story wing
Ground Floor	Police Department Locker Rooms, Property Storage, Maintenance Areas, Boiler Room, Cafeteria, etc.

Description of the Drawings:

An approximate breakdown of the working drawings is as follows:

Architectural Drawings	95 sheets
Structural Drawings	35 sheets
Electrical Drawings	47 sheets
Mechanical Drawings	69 sheets
Landscape Drawing	1 sheet
Total	247 sheets

The plans and specifications for this 1956 Bond Issue project were prepared by Weihe, Frick & Kruse, Architects, Hall, Pregnoff & Matheu, Structural Engineers, G.M.Simonson, Electrical and Mechanical Engineers, under the direction of the Department of Public Works, Bureau of Architecture, City and County of San Francisco.

OCCUPANCY

The occupancy of the new Hall of Justice is scheduled for January 1961, and will be as follows:

Occupancy of Building	Cost (%)	Area (%)	Sq.Ft.Area
Police Department - City Prison	58.00	63.60	443,397
Criminal Courts (4 Municipal)	9.20	5.20	38,000
Criminal Courts (4 Superior)	6.50	5.30	38,500
Criminal Courts (3 Traffic)	6.70	7.30	54,000
District Attorney	4.10	4.30	30,500
Adult Probation	3.70	3.80	22,000
Public Defender	.85	.90	6,200
County Clerk (Criminal Division)	.45	.50	5,500
Coroner	2.80	2.60	18,500
Sheriff's Detention Jails	7.70	6.50	46,000
Totals	100.00	100.00	702,597

With the major part of the work under construction ahead of schedule, and a balance remaining in the bond issue account of $2,893,876,86, according to the Controller's report of May 31, 1959, of which it appears that $821,000.00 will remain after completion of all work, Mr. Devitt was officially commended by the Board of Supervisors on July 6, 1959 for his excellent handling of this Bond Issue.

VIII 1958 Steinhart Aquarium Bond Issue $1,575,000.00

This Bond Issue for the Rehabilitation of the Steinhart Aquarium in Golden Gate Park, was approved in the election of June 3, 1958. An appropriation was requested for the funds on June 11, 1958 and was being processed at the beginning of the new fiscal year. Since the program and estimates were carefully established prior to the voting of the Bond Issue, the design is progressing rapidly. The work is divided into two phases and the breakdown is as follows:

A. Rehabilitation of Aquarium, Project A

Division			
1. (a)	Construction cost (Basis of Architect's contract)	$950,000	
(b)	Contingency 12%	114,000	$1,064,000.00
(c)	Inspection in Field, testing of materials	12,000	
2. (a)	Architect's and Engineer's Contract Fees (Basis of contract 10% of $950,000.00)	95,000	
(b)	Contingency but not to exceed 10% of $114,000.00	11,400	118,400.00
3. (a)	Bureau of Architecture conferences, surveys, borings, blueprints, checking drawings and specifications, typing and proofreading specifications, general clerical work during construction, etc.		12,900.00
4.	Allotment for Marine Decoration and Miscellaneous equipment		84,300.00

5. Miscellaneous Costs		9,000.00
	Subtotal	$1,288,600.00

B. Salt Water Supply Piping, Project B

1. (a) Construction costs	$237,000	
(b) Contingency	20,400	
(c) Inspection	6,000	$ 263,400.00
2. (a) Engineering Fees, Surveys, Blueprinting, and all technical services		23,000.00
	Subtotal	$ 286,400.00

GRAND TOTAL $1,575,000.00

IX Civic Auditorium Bond Issue $7,575,000.00

The Bond Issue was approved by the Finance Committee of the Board of Supervisors in June 1959, and upon the recommendation of the Mayor's Bond Screening Committee the amount was reduced by $200,000.00 which had been previously approved for restorative work at the Auditorium in the 1959-60 Budget. The amount of this proposed bond issue which will be on the November 3, 1959 ballot is therefore $7,575,000.00.

The Civic Auditorium, which is San Francisco's principal convention facility, is obsolescent. Built in 1914 it has not been modernized and maintenance has not been adequate. While other cities, such as Detroit, Los Angeles, Miami, Portland and Las Vegas have completed or are building new convention buildings, San Francisco does not have the space to do likewise. It is also impractical since the location of a new convention building would have to be in the same location as the Civic Auditorium and the wrecking of the existing building and building of a new structure would take at least two years, during which time the convention business, for all practical purposes, would be lost. It is therefore essential that the Civic Auditorium which is basically sound both in plan and construction, be completely rehabilitated and modernized so that it can successfully compete with new buildings in other cities.

The "Survey of Convention Facilities Needs in San Francisco" prepared by the Industrial Planning Associates, established requirements which must be met in the modernization and rehabilitation work as a part of an organized program to increase San Francisco's share of the Convention business from $30,000,000.00 in 1957 to $72,000,000.00 in 1980.

These requirements are as follows:

1. Rehabilitation of the Main Arena, Polk and Larkin Halls, to serve in the dual capacity of large meeting rooms and exhibit space.
2. Provide 60 small meeting rooms, seating from 40 to 250.
3. Improve the vertical transportation.
4. Replace the obsolete electrical, plumbing and mechanical systems, provide modern heating, lighting, plumbing and air conditioning systems.

The Bureau's report, revised April 15, 1959, describes in detail the work which will be done to achieve these ends. An estimate of cost and an interruptible construction schedule which will provide for completion of the work during periods of non-use of the Auditorium between scheduled conventions and special events. The total estimated cost of this Bond Issue was $7,775,000.00. The basic requirements and provisions made to provide for them are listed below:

1. The restoration of the Main Arena and Polk and Larkin Halls to serve as both large theatre-type meeting rooms and as exhibit space. While at present these rooms do serve in this dual capacity, their finishes are shabby and obsolete. The ceiling of the original arena is worn out and has been removed and awning-type ceiling installed as a temporary expedient. The acoustics in these three big meeting rooms are poor. The estimate provides for all of the above corrective work plus new seats for Polk and Larkin Halls.
2. Sixty meeting rooms seating from 40 to 250, a total of approximately 5,000. The Auditorium now has 16 meeting rooms, seating from 30 to 150. The estimate provides 64 meeting rooms seating a total of about 5,200.
3. The improvement of vertical transportation throughout the building. The Auditorium now has satisfactory stairs but only 2 obsolete passenger elevators. The consultants made a thorough study of this requirement and found that the best solution was escalators connecting every floor of the building, first through fourth, one new elevator, and renewing the other elevators.
4. The general renovation of the building. The mechanical system is obsolete and the electrical system is illegal, overloaded, and dangerous. The estimate includes a

modern mechanical system, with proper heating, ventilating, and air conditioning, and a modern electrical and lighting system. It also includes the renovation of all corridors, miscelleneous rooms, toilets, and the basement. By far the greatest single expense in the new mechanical system which amounts to about one-third of the entire work.

X Proposed Bond Issue: New Civil Courts Building and Remodeling of City Hall $22,150,000.00

During the spring of 1957 the Bureau, working in close cooperation with the architects for the Civic Center Development Plan, the advocates of a new Courts Building, and the Municipal Conference, prepared estimates for this proposed work. The bond issue is based on the Report of the Architects and Engineers for the San Francisco Civic Center Development Plan, dated May 7, 1957. In their survey of existing conditions at the Civic Center, the consultants found that:

> "Facilities which are now provided in the Civic Center have become over-crowded requiring the use of temporary structures and rental properties. In many cases, offices are scattered and no provision for expansion is available. The present permanent spaces have become largely outmoded. It is essential that additional space be provided and that existing space be rehabilitated to provide efficient up-to-date accommodations that are suitable for the functions to be housed in them."

As a solution to the space problems the Consultants recommended:

1. The construction of a new Civil Courts Building on Marshall Square to house the Municipal and Superior Courts, and all their attendant facilities, at an estimated cost of $16,207,254.00.
2. The remodeling of the City Hall to provide office space for the Mayor, Chief Administrative Officer, Board of Supervisors, and the majority of the City and County Departments at an estimated cost of $7,918,462.00.
3. The future construction of an Annex Office Building across McAllister Street from the City Hall in the block bounded by McAllister, Van Ness, Polk, and Redwood Streets. This building would be needed in the future but since it

was not urgently required at present its construction should be deferred until a later date.

The total amount of the Bond Issue recommended by the Consultants is as follows:

1. New Civil Courts Building		$16,207,254.00
2. Remodeling of City Hall		7,918,462.00
	Total	$24,125,716.00

This amount was later modified in conferences with interested citizens and public officials by the reduction of facilities and space as follows:

1. New Civil Courts Building		$14,379,450.00
2. Remodeling of City Hall		7,770,550.00
	Total	$22,150,000.00

The Bond Issue was approved by the Mayor's Bond Screening Committee on June 3, 1957, finance Committee on June 5, 1957, and by the Board of Supervisors on June 10, 1957. The Bond Issue was defeated in the November 1957 and 1958 elections by narrow margins and will not be on the November 1959 ballot. It will, however, probably be revived at a later date after other facilities which are more urgently needed have been provided.

XI Proposed Bond Issue - Public Library $5,190,155.00

Data was prepared for this Bond Issue which includes rehabilitation and additions to the Main Library building and nine new branch libraries, in time so that it could be presented on the November 1957 ballot. However, it did not receive the support of the Mayor and downtown organization and was therefore not on this ballot. It will probably be revived at a later date after a complete survey of the Library facilities, which is now in progress.

PERSONNEL

The total permanent allowance of personnel in the Bureau remained at 61, but because of retirements, etc., two permanent positions were not filled. Requisitions are in for all permanent positions, however, and as soon as lists are established they will be filled. Because of the lack of lists, and the great amount of school vacation jobs this summer, it was necessary to employ 13 temporary employees. the total employees as of June 30, 1959 were 72.

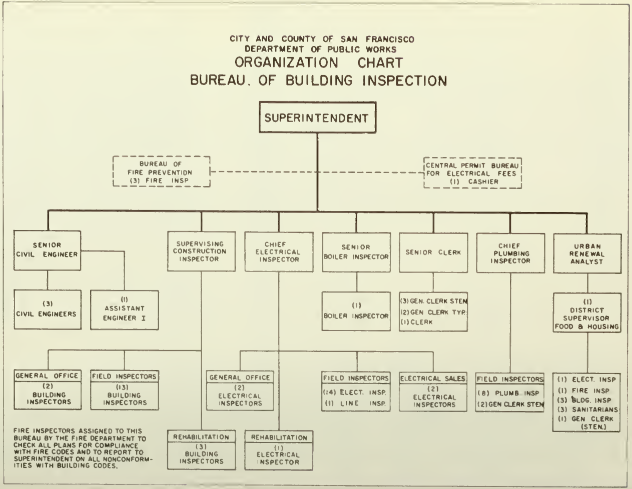
	30 June 1958		30 June 1959		Change	
	Perm.	Temp.	Perm.	Temp.	Perm.	Temp.
City Architect	1	0	1	0	0	0
Asst. City Architect	1	0	1	0	0	0
Architects	10	0	10	0	0	0
Sr. Arch. Draftsmen	9	0	9	0	0	0
Arch. Draftsmen	8	1	8	1	0	0
Jr. Draftsman	1	0	1	0	0	0
Office Assistant	1	0	1	0	0	0
General Clerk	1	0	1	0	0	0
Sr. Clerk	1	0	1	0	0	0
Gen. Clerk Steno.	4	1	4	1	0	0
Gen. Clerk Typist	3	1	3	1	0	0
Super. Const. Inspector	2	0	2	0	0	0
Building Inspector	13	14	17	10	+4	-4
Total	55	17	59	13	+4	-4

Total Personnel: 72

The Bureau's personnel is divided into four groups according to location. The duties performed by these groups are briefly described below:

Personnel	Group	Location	Activities
6	1	Room 265 City Hall	Administrative Conferences, Assembly of Plans and Specifications for Bidding, General Files
4	2	Room 252 City Hall	Estimates, Preliminary Design Program and Budget Section, Analysis of Construction
31	3	45 Hyde St.	General Drafting Room, Specifications, Drawings, Research, Checking and Report Section
31	4	Room 250 & in the Field	Field Inspection

Total Personnel: 72



CITY AND COUNTY OF SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS
ORGANIZATION CHART
BUREAU. OF BUILDING INSPECTION

SUPERINTENDENT
BUREAU OF FIRE PREVENTION (3) FIRE INSP
CENTRAL PERMIT BUREAU FOR ELECTRICAL FEES (1) CASHIER
SENIOR CIVIL ENGINEER
(3) CIVIL ENGINEERS
(1) ASSISTANT ENGINEER I
SUPERVISING CONSTRUCTION INSPECTOR
GENERAL OFFICE (2) BUILDING INSPECTORS
FIELD INSPECTORS (13) BUILDING INSPECTORS
REHABILITATION (3) BUILDING INSPECTORS
CHIEF ELECTRICAL INSPECTOR
GENERAL OFFICE (2) ELECTRICAL INSPECTORS
REHABILITATION (1) ELECTRICAL INSPECTOR
FIELD INSPECTORS (14) ELECT. INSP. (1) LINE INSP.
ELECTRICAL SALES (2) ELECTRICAL INSPECTORS
SENIOR BOILER INSPECTOR
(1) BOILER INSPECTOR
SENIOR CLERK
(3) GEN. CLERK STEN (2) GEN CLERK TYP. (1) CLERK
CHIEF PLUMBING INSPECTOR
FIELD INSPECTORS (8) PLUMB INSP (2) GEN CLERK STEN
URBAN RENEWAL ANALYST
(1) DISTRICT SUPERVISOR FOOD & HOUSING
(1) ELECT. INSP (1) FIRE INSP (3) BLDG. INSP (3) SANITARIANS (1) GEN CLERK (STEN.)

FIRE INSPECTORS ASSIGNED TO THIS BUREAU BY THE FIRE DEPARTMENT TO CHECK ALL PLANS FOR COMPLIANCE WITH FIRE CODES AND TO REPORT TO SUPERINTENDENT ON ALL NONCONFORMITIES WITH BUILDING CODES.

BUREAU OF BUILDING INSPECTION

Lester C. Bush, Superintendent

FUNCTIONS

For the purpose of ensuring compliance with City Ordinances and the State Housing Act the Bureau of Building Inspection reviews plans and inspects construction and installations involving structural, electrical, plumbing and mechanical work throughout the City. It also studies and reports on legislation affecting buildings and structures, and proposes new legislation as required. It is also the enforcing agency for the City Planning Code.

At the beginning of the fiscal year, the Plumbing Division was transferred to this bureau from the Health Department for the purpose of securing better coordination and enforcement of code provisions relating to plumbing installations. Also, during the fiscal year, the Urban Renewal Division was created in the bureau for the purpose of maintaining the program of enforcing code provision in conservative areas to remedy the existence of substandard, unsanitary and deficient residential buildings and dwelling units.

URBAN RENEWAL PROGRAM

The Urban Renewal Division of the Bureau has as its purpose the carrying out of Rehabilitation and Conservation programs, including studies and planned area inspections. Its personnel consists of: 1 Urban Renewal Analyst, 1 District Supervisor, Food and Housing, 3 Building Inspectors, 3 Sanitarians, 1 Fire Inspector, I Electrical Inspector, 1 Clerk-Stenographer.

Survey of Converted Structures

The initial phase of a survey of the conversion of residential structures was carried out in Redevelopment Area A, Western Addition. Of 2928 residential structures surveyed 808 or 28% were found to be converted. There was a 25% increase in dwelling units.

A city-wide conversion survey followed. 5371 blocks were surveyed, 8979 of 126,301 or 7.1% residential structures were found to be converted, with an average increase from 1.84 dwelling units to 3.74 dwelling units per structure. the process of conversion added 16,965 dwelling units to the city supply. A five percent sample of this city-wide survey is being researched for permits to determine the legality of conversions. Preliminary results indicate 75% of these conversions have been done without permit.

are required to meet the approval of the electrical division of this bureau.

Night clubs and places of public assembly are licensed through the Health Department, and before a permit to operate is granted the electrical requirements of this bureau in regard to adequate lighting, emergency and exit lights must be complied with, and approval forwarded to the Health Department.

A copy of all complaints and violations of the Electrical Safety Orders of the State of California issued to property owners is filed with this bureau, is checked and verified by the electrical inspectors, and held in the files until final approval is given.

State of California laws require that the electrical installation of wiring circuits, fixtures, signs, motors and electrical appliances be made by contractors licensed by the State, and San Francisco ordinances require that such licensed contractors be registered with this bureau. Industrial plants which have their own plant electricians must also register with this bureau.

All spray painting establishments in the City of San Francisco are licensed through the Fire Prevention Bureau, and before licenses are issued the electrical work connected therewith must be approved by this bureau.

BOILERS AND AIR TANKS

Steam boilers and air pressure tanks are inspected to ensure compliance with all existing laws.

PLUMBING WORK

The bureau regulates, supervises and inspects materials and workmanship of plumbing systems, water distribution systems, gas piping and appliances, to insure compliance with laws, ordinances, codes and approved plans and specifications.

ORGANIZATION

Duties of the various members of the staff are described in the following paragraphs.

SUPERINTENDENT. In addition to supervising the office he takes an active part in the deliberations of various departments of the city government, as well as other organizations, with reference to matters of building construction, the building code, and building safety, and is also Coordinator of Urban Renewal.

Mr. Arthur T. Hauck was Acting Superintendent beginning April 7, 1959, pending the holding of Civil Service Examination to select a new Superintendent to replace Mr. Bush, who was on sick leave prior to retirement.

Supervising Construction Inspector. Acts as assistant to the Superintendent in the field; assigns and supervises the work of building inspectors; prepares records and reports, and checks construction progress. He also supervises the Condemnation Program.

Building Inspectors. One Building inspector assists the Supervising Construction Inspector. He assists the public at the counter and provides them with the information they seek concerning various building regulations. Handles all applications for permits at last step before permits are issued.

One building inspector represents the Director, Department of Public Works, on all cases coming before the Board of Permit Appeals with the exception of new construction. He inspects and reports on all night clubs and dance halls, when requested by the Police Department.

Thirteen building inspectors are assigned to specific districts into which the city is divided and are charged with the responsibility of inspection work in their respective districts. This includes new construction of all types, alterations, billboards and signs. They report on all applications for construction in their districts prior to examination by the divisions of the bureau; prepare and post Certificates of Final Completion; check and follow up complaints; interview property owners; and appear before courts in matters of condemnation and prosecution.

Three building inspectors are assigned to spot condemnation work.

Boiler Inspectors. Make all installation inspections where any pressure vessel is installed. Inspect all boilers and air pressure vessels regularly when they are not insured, and inspect and recommend repairs to defective equipment. As deputy inspectors they must check all requests made by the Division of Industrial Safety and report any action taken by the city. They investigate all accidents where pressure vessels are involved and report the probable cause to the State and to the National Board of Boiler and Pressure Vessel Inspectors. One inspector is a member of the A.S.M.E. Boiler Code Committee, and passes on all new A.S.M.E. Code changes, and submits his report each month to the New York office of the A.S.M.E. Complaints about pressure vessels are investigated and the necessary action taken to eliminate any defects or violations, if found.

Senior Engineer (Civil). Acts as Chief Structural Engineer; reviews engineering data submitted for approval of new materials and assemblies, and makes recommendations to the Superintendent regarding such approvals; and supervises the work of the other engineers in the bureau. (Position was reclassified near the end of the fiscal year to Assistant Superintendent.)

Structural Engineers (Civil). Check and report on all plans pertaining to structural engineering; make field inspections; follow up matters concerning structural safety brought to their attention by the Supervising Construction Inspector or the district building inspectors; and assist other departments or bureaus in structural matters.

One Engineer, Civil, examines all plans and details for new construction and estimates the cost thereof. He also represents the Director, Department of Public Works, on all cases coming before the Board of Permit Appeals which concern new construction.

Senior Clerk. In charge of all clerks in the bureau and all administrative work.

Chief Electrical Inspector. Under general direction assigns, supervises and reviews the work of electrical inspectors; approves or disapproves plans and specifications for electrical installations; supervises the maintenance of inspection records; and makes required reports.

Two electrical inspectors are detailed to the enforcement of the Electrical Sales Ordinance. This ordinance governs the sale, display, or giving away as a premium, all electrical material, devices and appliances for attachment to, or installation in or on any electrical circuit or system for light, heat or power. This entails visiting all retail stores, premium stores, factory agents, jobbers, manufacturers, and wholesalers to inspect all materials, devices, and appliances, and to determine whether they are approved by this department before they can be sold, displayed, or installed in San Francisco. In many cases this means granting a provisional approval on articles that have been submitted to Underwriters' Laboratories, Inc. for testing but testing not having been completed allows a manufacturer to install or sell these appliances or materials with a proviso that any corrections required be made in the field. There are 2263 retail stores registered under this ordinance at present, which are visited regularly for the purpose of inspecting the merchandise. As more merchants are going into business all the time and many ownerships are being changed, it is necessary to visit these stores to check their registration and inspect their merchandise.

The Line Inspector. Inspects all installations, alterations, and maintenance of overhead lines owned and operated by public and private utilities used for the purpose of distributing electric power, light, communication and signal transmission, to see that they conform to the Rules for Overhead Line Construction (G.O.95), Public Utilities Commission, State of California, and the San Francisco Electrical Code. The line inspector also checks plans and specifications and inspects all overhead lines pertaining to trolley coach installations. He inspects temporary electrical street decorations when supported by trolley span wires, or messengers, and inspects installations of radio and television antennas. He checks all underground districts to see that they are kept clear of all overhead wires and cables, and checks the erection of scaffolds that may be in proximity to high voltage lines.

Two electrical inspectors are assigned to office work. They handle all complaints and requests for information from the public.

One electrical inspector is assigned to the Urban Renewal Program.

Fourteen electrical inspectors are assigned to districts in the city and each handles all of the electrical work in his assigned district except those items under the Electrical Sales ordinance.

Chief Plumbing Inspector. Under general direction: assigns, supervises and reviews the work of plumbing inspectors; orders changes, repairs, suspension of work or causes arrests in cases of violations as the case requires, acts as secretary to gas appliance dealers examining board; assists in preparing examination for licenses for gas appliance dealers and journeyman plumbers and collects fees for such licenses; makes required reports and performs related duties as required.

Plumbing Inspectors. Eight plumbing inspectors are detailed to inspect materials and workmanship of plumbing systems, water distribution systems, gas piping and appliances in assigned districts. This inspection work is done to assure compliance with laws, ordinances and approved plans and specifications pertaining to plumbing, water and gas installations. The plumbing inspector has the authority to order changes, halt operations or make arrests for violations of laws, ordinances or deviations from plans or specifications. They make required reports and perform related duties as required. All complaints sent to this office concerning defective plumbing or gas piping and appliances are thoroughly investigated and necessary repairs ordered made to correct violations.

URBAN RENEWAL ANALYST. Under general direction assists in the planning, organization and direction of environmental surveys needed to satisfy Federal requirements for regulating and controlling Urban Renewal; directs planned area inspections for compliance with the San Francisco Housing Code and other codes pertaining to Urban Renewal; collects and evaluates data for statistical material which serves as a basis for administrative decisions and policies; maintains liaison with various city groups; develops records and forms; prepares reports; and performs related duties as required.

SANITARIAN. Under direction: In an assigned district inspects houses and industrial establishments and premises for health and safety hazards; sees that sanitary conditions are maintained and that all related laws and ordinances are enforced; inspects conditions that constitute a fire, health or safety hazard, or a public nuisance due to unsanitary conditions; recommends appropriate action to remedy situations when violations of laws or ordinances are discovered; makes required reports; and performs related duties as required.

BUILDING CONSTRUCTION

Fiscal Year	Permits	Cost of Construction
1955-1956	9445	$71,692,205
1956-1957	11527	66,725,530
1957-1958	11207	75,882,446
1958-1959	11614	92,217,822

WORK DONE

The extent of routine operations of this Bureau for the fiscal years 1957-1958 and 1958-1959 is set forth in the following tabulation taken from the records of the Central Permit Bureau.

Type of Construction	Number of Permits 1957-58	Estimated Cost	Number of Permits 1958-59	Estimated Cost
1A	18	$15,058,531	20	$25,346,546
1B	11	9,093,439	4	8,633,000
2	-	-	1	240,000
3	32	3,567,694	28	2,615,323
4	28	670,240	20	1,361,250
5	993	22,226,911	1146	28,203,405
Alterations	10,125	25,265,631	10,395	25,818,298
TOTALS	11,207	$75,882,446	11,614	$92,217,822

Type 1A	Steel frame with reinforced concrete walls and floors. Fire-resistive construction.
Type 1B	Built entirely of reinforced concrete. Fire-resistive construction.
Type 2	Similar to Type 1, but with limitations.
Type 3	Wood frame floors with exterior walls of masonry. Ordinary masonry construction.
Type 4	Light incombustible frame construction.
Type 5	Wood frame construction.

BUREAU STATISTICS FOR FISCAL YEAR

BUILDING INSPECTION DIVISION:

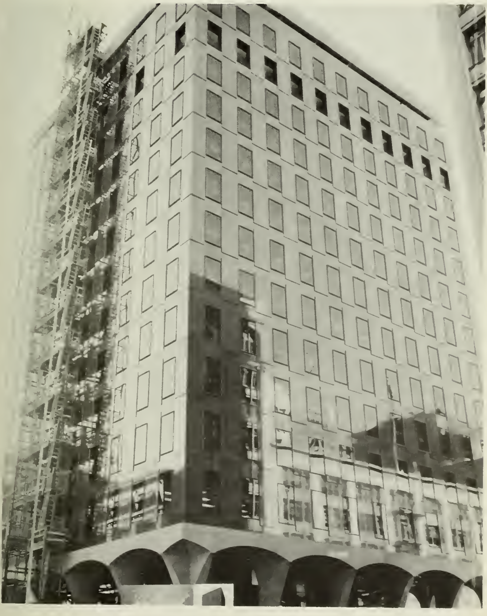
Inspections reported by inspectors of buildings	53,052
Projects remaining on which permits have been issued that have not been reported completed by inspectors of buildings	4,490
Complaints that have been reported adjusted by inspectors of buildings	4,359
Inspections reported by inspectors of boilers	897
Complaints and requests for information recorded	266
Applications for permits examined by and approved by structural engineers	3,881
Applications for permits examined and approved by plan checker	1,347
Miles traveled during the year by 39 passenger cars on inspection service	281,454

ELECTRICAL INSPECTION DIVISION:

Permits issued, wiring, fixtures, signs	17,248
Inspections made	55,461
Complaints investigated (found defective)	4,639
Installations uncovered that were not with the department ("sneaked-in jobs")	2,550
Installations in progress as of June 30, 1959	4,936
Installations completed	17,186
Pin ball machine inspections	740
Juke box inspections	76
Electrical Sales inspections	3,146
Overhead line inspections	4,757

PLUMBING INSPECTION DIVISION:

Plumbing permits issued	4,114
Water permits issued	3,332
Gas piping and appliance permits (A and C series)	9,075
Gas permits on plumbing	5,853
Plumbing inspections made	11,765
Water inspections made	8,934
Plumbing complaints investigated	705
Gas piping complaints investigated	4
Gas appliance complaints investigated	94
Plumbing installations completed	3,340
Gas lines inspected final	3,365
Gas appliances approved	9,314



JOHN HANCOCK INSURANCE BUILDING
S.E. corner California & Battery Streets

BETHLEHEM STEEL OFFICE BUILDING
N.W. corner Davis & California Streets

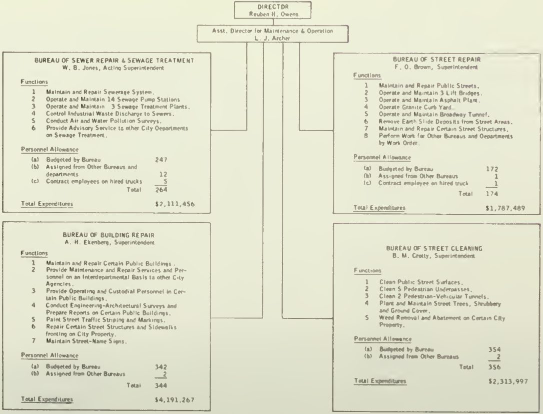
CANDLESTICK BALL PARK

JACK TAR HOTEL
Block Bounded by Van Ness Ave., Franklin, Post & Geary Sts.

ORGANIZATIONAL RELATIONSHIPS

MAINTENANCE, REPAIR & OPERATION

1958-1959



DIRECTOR
Reuben H. Owens

Asst. Director for Maintenance & Operation
L. J. Archer

BUREAU OF SEWER REPAIR & SEWAGE TREATMENT
W. B. Jones, Acting Superintendent

Functions

1 Maintain and Repair Sewerage System.
2 Operate and Maintain 14 Sewage Pump Stations
3 Operate and Maintain 3 Sewage Treatment Plants.
4 Control Industrial Waste Discharge to Sewers.
5 Conduct Air and Water Pollution Surveys.
6 Provide Advisory Service to other City Departments on Sewage Treatment.

Personnel Allowance

(a)	Budgeted by Bureau	247
(b)	Assigned from Other Bureaus and departments	12
(c)	Contract employees on hired trucks	5
	Total	264

Total Expenditures $2,111,456

BUREAU OF BUILDING REPAIR
A. H. Ekenberg, Superintendent

Functions

1 Maintain and Repair Certain Public Buildings.
2 Provide Maintenance and Repair Services and Personnel on an Interdepartmental Basis to other City Agencies.
3 Provide Operating and Custodial Personnel in Certain Public Buildings.
4 Conduct Engineering-Architectural Surveys and Prepare Reports on Certain Public Buildings.
5 Paint Street Traffic Striping and Markings.
6 Repair Certain Street Structures and Sidewalks fronting on City Property.
7 Maintain Street-Name Signs.

Personnel Allowance

(a)	Budgeted by Bureau	342
(b)	Assigned from Other Bureaus	2
	Total	344

Total Expenditures $4,191.267

BUREAU OF STREET REPAIR
F. O. Brown, Superintendent

Functions

1 Maintain and Repair Public Streets.
2 Operate and Maintain 3 Lift Bridges.
3 Operate and Maintain Asphalt Plant.
4 Operate Granite Curb Yard.
5 Operate and Maintain Broadway Tunnel.
6 Remove Earth Slide Deposits from Street Areas.
7 Maintain and Repair Certain Street Structures.
8 Perform Work for Other Bureaus and Departments by Work Order.

Personnel Allowance

(a)	Budgeted by Bureau	172
(b)	Assigned from Other Bureaus	1
(c)	Contract employee on hired truck	1
	Total	174

Total Expenditures $1,787,489

BUREAU OF STREET CLEANING
B. M. Crotty, Superintendent

Functions

1 Clean Public Street Surfaces.
2 Clean 5 Pedestrian Underpasses.
3 Clean 2 Pedestrian-Vehicular Tunnels.
4 Plant and Maintain Street Trees, Shrubbery and Ground Cover.
5 Weed Removal and Abatement on Certain City Property.

Personnel Allowance

(a)	Budgeted by Bureau	354
(b)	Assigned from Other Bureaus	2
	Total	356

Total Expenditures $2,313,997

SUMMARY

Total Personnel Allowance . . . .$ 1,138

Total Expenditures, less reimbursements. . . .$10.404.209

MAINTENANCE AND OPERATION

Lawrence J. Archer, Assistant Director

Maintenance and operation activities of the Department of Public Works have, since October 1, 1951, been centered at the Maintenance Yard, 2323 Army Street, in the four bureaus of Sewer Repair and Sewage Treatment, Street Repair, Building Repair and Street Cleaning. Functional and organizational relationships of the bureaus are indicated on the opposite page.

OPERATIONS

The work-load of the bureaus continued at about the same level as during the preceding year. Daily operations in several respects continue to be severely hampered by restrictions that cause high working costs which are not within control of this department to correct. In the Annual Report for 1956-57 and again in the Annual Report for 1957-58, attention was invited to these adverse circumstances.

PERSONNEL

The maintenance and operation bureaus are staffed with 1115 employees budgeted by the individual bureaus, 17 employees assigned from other bureaus and 6 contract persons on hired trucks; a total of 1138 persons. These employments cover 85 civil service classifications made up of technical, administrative, supervisory, mechanics and maintenance and custodial personnel.

There was a net decrease of 7 employees in positions budgeted by the respective bureaus as compared to the total number authorized the preceding year (Tables A and C).

Over the past 10 years there has been an increase of 132 employments, or about 13.5%. During this 10 year period there were 7 new functions added to bureau responsibilities, accounting for a current total of 160 employees. Exclusive of these additional functions it is noteworthy that there is a net decrease of 28 employee allowances during the past 10 years despite the substantial increase in work load.

EXPENDITURES

Expenditures of maintenance and operation bureaus during the year from both budgeted appropriations and funds received from other sources totailed $10,404,209. (Tables B and E)

This expenditure represents a per capita cost of $12.67, based on an estimated population of 821,000 for this city.

Over a period of 10 years, the total annual expenditures, from funds budgeted solely by the respective bureaus, increased from $3,436,727 in 1949-50 to $9,530,471 in 1958-59, an increase of $6,093,744. Excluding $3,153,127 expended in 1958-59 for the 7 new functions that were added in the interim 10 years, the increase in cost is reduced to $2,940,617 or about 86 percent.

PRINCIPAL FACILITIES

Maintenance Yard, 2323 Army Street

In operation since October 1, 1951
Land Area: 6.08 acres with market value of about $795,000
Improvements: Office and Utility area, 11,880 sq.ft.
Shop area 29,040 sq.ft.
Carport area 31,120 sq.ft.
Replacement value, about $1,000,000

Maintenance and repair expenditures during year, $7,900, exclusive of upkeep by operating crews.
Number of persons assigned to or operating from Yard, 478.
Automotive equipment normally operating from Yard, 154 units

Richmond-Sunset Sewage Treatment Plant, Golden Gate Park

Operating Bureau: Sewer Repair and Sewage Treatment

In operation since March, 1939
Land Area: 4.5 acres, including 1.3 acres of landscaped area.
An additional landscape area of about one acre alongside the entrance road is also maintained by the Plant

Average dry weather treatment capacity: 15 mgd
Maximum storm water capacity: 45 mgd
Replacement value, of improvements: $1,980,000
of equipment: $1,200,000

Maintenance and repair expenditures during year $8,300, exclusive of upkeep by plant forces and regularly assigned mechanics.
Normal personnel complement: 20 persons

North Point Sewage Treatment Plant, 111 Bay Street

Operating Bureau: Sewer Repair and Sewage Treatment

In operation since December 1951
Land: area 6.4 acres, including 1.3 acres of landscaped area.
Market value, about $1,135,000

Average dry weather treatment capacity: 65 mgd
Maximum storm water capacity: 150 mgd
Replacement value, of improvements: $9,630,000
of equipment: $3,980,000

Maintenance and repair expenditures during year: $36,350, exclusive of upkeep by operating crew and regularly assigned mechanics.
Normal personnel complement: 33 persons

Southeast Sewage Treatment Plant, 1700 Jerrold Avenue

Operating Bureau: Sewer Repair and Sewage Treatment

In operation since December, 1951
Land: Area 12.3 acres presently in use for plant operations including 3.8 acres of landscaped area.
Market value, about $1,610,000

Average dry weather treatment capacity: 30 mgd
Maximum storm water capacity: 70 mgd
Replacement value; of improvements: $6,070,000
of equipment: $3,780,000

Maintenance and repair expenditures during year: $33,336, exclusive of upkeep by operating crew and regularly assigned mechanics.
Normal personnel complement: 53 persons

Sewage Pump Stations at 14 locations

Operating Bureau: Sewer Repair and Sewage Treatment

Combined pumping capacity: 11.16 mgd
Total Land: Area, 1.25 acres
Market value, $73,000

Total Replacement value, of improvements: $460,000
of equipment: $1,500,000

Maintenance and repair expenditures during year: $7,500, exclusive of upkeep by operating crew.
Normal total personnel complement: 13 persons

Municipal Asphalt Plant, Quint and Jerrold Streets

Operating Bureau: Street Repair

In operation at present site since May 9, 1955
Land: Area, 1.68 acres
Market value, $162,000
Output capacity: 90 tons per hour
Replacement value of improvements: $590,000
Production during year: 49,797 tons at average unit cost of $5.25 per ton

Maintenance and repair expenditure $3,851 exclusive of upkeep by plant forces.
Normal personnel complement: 5 to 6 employees

Lift Bridges over Navigable Waters, - 3 Bridges

Operating Bureau: Street Repair
Number of openings for ship passages during year:

3rd and Channel,	1203
4th and Channel,	757
Islais Creek	1084
Total	3044

Replacement value of improvements:

3rd Street Bridge	$3,041,813
4th Street Bridge	876,026
Islais Creek Bridge	2,009,966
Total	$5,927,805

Operation cost for year, $126,545

Maintenance and repair cost for year, $1,685, exclusive of upkeep by operating crew.
Normal personnel complement: 18.2 employees

Broadway Tunnel, vehicular and pedestrian travel

Operating Bureau: Street Repair
In operation since December 21, 1952
Total length, each tube: 1616.25 lin.ft.

Replacement value: about $9,210,000
Operation cost for year: $35,551
Maintenance and repair of tunnel 1958-59: $5,193, exclusive of upkeep by operating force.
Normal personnel complement: 4.2 employees

Stone Curb Yard located on Southeast Sewage Treatment Plant land

Operating Bureau: Street Repair
In operation at present site since August 27, 1958
Land area: 0.5 acres
Replacement value of improvements about $7,500
Normal personnel complement: 2 employees

Street Cleaning Yard, 2350 - 19th Avenue

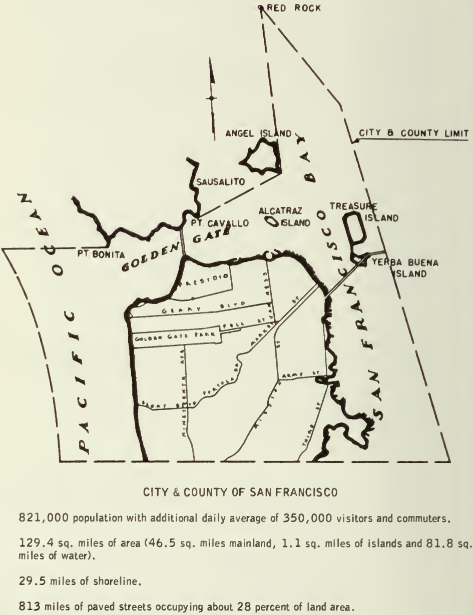
Operating Bureau: Street Cleaning
In operation at present site since 1939
Land: Area, 0.29 acres
  Market value, $37,000
Replacement value of improvements: $44,000
Maintenance and repair of plant, 1958-59 $500, exclusive of upkeep by crews assigned to operate from Yard.
Number of persons operating from Yard, 21
Automotive equipment operating from Yard, 14 units

Street Tree Division Office and Storeroom

Located below viaduct at Sloat and Sunset Blvd.
Operating Bureau: Street Cleaning
In operation at present site since 1955
Floor area: 2000 sq.ft.
Replacement value of improvements: $24,000
Number of persons operating from facility: 22

CLIMATOLOGY

Weather is a dominant factor in many of the maintenance operations of the department. Rainfall, in particular, has considerable bearing upon the extent and nature of field operations during winter months. Whereas the past year was one of the driest on record, the previous year was one of the wettest. The annual rainfall for San Francisco, as recorded by the Federal Weather Bureau from June 30, 1958 to July 1, 1959 amounted to 10.46 inches as compared to a rainfall of 36.48 inches in 1957-58 and a norm of 20.51 inches. The past season was the driest since 1919-20. Measurable amounts of precipitation fell on 44 days of the year. Monthly precipitation for



CITY & COUNTY OF SAN FRANCISCO

821,000 population with additional daily average of 350,000 visitors and commuters.

129.4 sq. miles of area (46.5 sq. miles mainland, 1.1 sq. miles of islands and 81.8 sq. miles of water).

29.5 miles of shoreline.

813 miles of paved streets occupying about 28 percent of land area.

the past year, compared to the average monthly precipitation recorded since 1850, both indicated in inches, are as follows:

Month	Average Precipitation Since 1850		Precipitation 1958-59
July 1958	.01		.05
August	.02		T
September	.28		.04
October	.95		.12
November	2.36		.09
December	4.44		1.48
January 1959	4.69		3.96
February	3.67		4.04
March	3.08		.30
April	1.55		.36
May	.68		.02
June	.15		T
		Total	10.46
		Normal	20.51

Other climatic conditions had little effect on operations but are recorded as a matter of interest:

Temperature averaged 63.6° F. maximum and 51.0° F. minimum with an extreme high of 92° F. and an extreme low of 43° F. The highest temperature recorded since 1900 is 101° F., the lowest, 27° F. in 1932. Average temperature for the past year was 58.9° F.

Wind velocities averaged 8.3 miles per hour with a maximum of 40 miles per hour recorded. Prevailing direction of wind was from the west.

Relative humidity at 8:00 a.m. averaged 79.9% with extremes between 23% and 97%.

TABLE A

PERSONNEL ALLOWANCES OVER 10 YEAR PERIOD -- As budgeted by Maintenance & Operation Bureaus

Fiscal Year	Sewer Repair & Sew. Treat.	Street Repair	Street Cleaning	Building Repair	Total
1958-59	247	172	354	342 (g)	1115
1957-58	248	172	358	344	1122
1956-57	243 (f)	173 (f)	355 (f)	346 (f)	1117
1955-56	238	167	348 (g)	341 (e)	1094
1954-55	236 (d)	172	332	330	1070
1953-54	131	185	332	319 (c)	967
1952-53	138	190 (b)	332	312	972
1951-52	144	207	332	302	985
1950-51	146 (a)	208	332	292	978
1949-50	138	236	326	283	983
				Overall Increase in 10 Years	132
				or about	13.5

NOTE: New functions added to responsibilities of bureaus:

(a) July 1, 1950 Operation of Sewage Pump Stations transferred to Bureau of Sewer Repair (12 stations with 8 employees at time of transfer increased to present 14 stations and 14 employees.)

(b) Dec. 21, 1952 Operation and maintenance new Broadway Tunnel was added to duties of Bureau of Street Repair (4-1/5 employees.)

(c) July 1, 1953 Maintenance and repair of 233 additional Public Buildings for 26 departments transferred to Building Repair.

(d) July 1, 1954 Sewage Treatment Plants transferred to Bureau of Sewer Repair (3 treatment plants with 102 employees at time of transfer increased to present 106 employees to allow for additional work shifts.)

(e) July 1, 1955 Inspection and Survey of Public Buildings added to duties of the Bureau of Building Repair (2 employees.)

(f) July 1, 1955 Maintenance of street trees transferred to Bureau of Street Cleaning (15 employees at time of transfer was increased to present 21 employees due to increase in landscape areas.)

(g) July 1, 1956 Includes additional chauffeurs for City-owned trucks which replaced hired trucks (Sewer Repair, 5; Street Repair, 6; Street Cleaning, 1; Building Repair, 1 chauffeur.)

(h) July 1, 1958 Replacement and Reconstruction of Public Buildings for 7 departments transferred to Building Repair.

TABLE B

EXPENDITURES OVER 10-YEAR PERIOD -- From Bureau's Budgeted Funds, only

Fiscal Year	Sewer Repair & Sew. Treat.	Street Repair	Street Cleaning	Building Repair	Total
1958-59	$1,974,687	$1,787,489	$2,313,997	$3,454,298 (g)	$9,530,471
1957-58	1,935,889	1,658.632	2,203,411	2,886,222	8,684,154
1956-57	1,799,547	1,553,342	1,984,983	2,139,327	7,477,199
1955-56	1,691,217 (d)	1,412,902	1,824,406 (f)	2,405,088 (e)	7,333,613
1954-55	1,589,848	1,343,467	1,674,902	1,571,053	6,179,270
1953-54	650,728	1,341,384	1,637,117	1,483,932 (c)	5,113,161
1952-53	617,481	1,055,346 (b)	1,473,533	803,349	3,949,709
1951-52	602,158	953,999	1,333,663	777,837	3,667,657
1950-51	609,163	879,561	1,254,348	740,816	3,483,888
1949-50	595,336	857,762	1,268,462	715,167	3,436,727

Added new functions in past 10 years (ihcluded in above)			Expenditures 1958-59
(a)	July 1, 1950	Operation of Sewage Pump Stations transferred to Bureau of Sewer Repair	$ 109,196
(b)	Dec. 21, 1952	Operation of new Broadway Tunnel added to Bureau of Street Repair	37,762
(c)	July 1, 1953	Maintenance and repair of Public Buildings for 26 departments transferred to Building Repair	1,739,169
(d)	July 1, 1954	Sewage Treatment Plants transferred to Sewer Repair	1,027,807
(e)	July 1, 1955	Inspection and Survey of Public Buildings inaugurated by Building Repair	19,170
(f)	July 1, 1955	Maintenance of street trees transferred to Street Cleaning	135,122
(g)	July 1, 1958	Replacement & Reconstruction of Public Bldgs. for 7 departments transferred to Building Repair	54,901
		Total	$3,153,127

TABLE C
CHANGES IN PERSONNEL FROM PREVIOUS YEAR

Bureau		Change
Sewer Repair and Sewage Treatment		
(a)	Addition of 1 Portable & Hoisting Engineer	+1
(b)	Deletion of 2 Cribbers	-2
Building Repair - Interdepartmental Service		
(a)	Addition of Cement Finisher	+1
(b)	Deletions of 1 Foreman Painter, 1 Plumber and 1 Steamfitter	-3
Street Cleaning		
(a)	Addition of 1 District Director	+1
(b)	Deletion of 4 laborers and 1 chauffeur	-5
	Total Net Decrease in Position Allowance	7

TABLE D
RENTED AND HIRED TRUCKS IN USE

Bureau	Hired Trucks (with Driver)	Rented Trucks (without Drivers)
Sewer Repair & Sewage Treatment	5	-
Street Repair	1	-
Street Cleaning	-	-
Building Repair	-	5
Total Number	6	5

TABLE E

SUMMARY OF EXPENDITURES

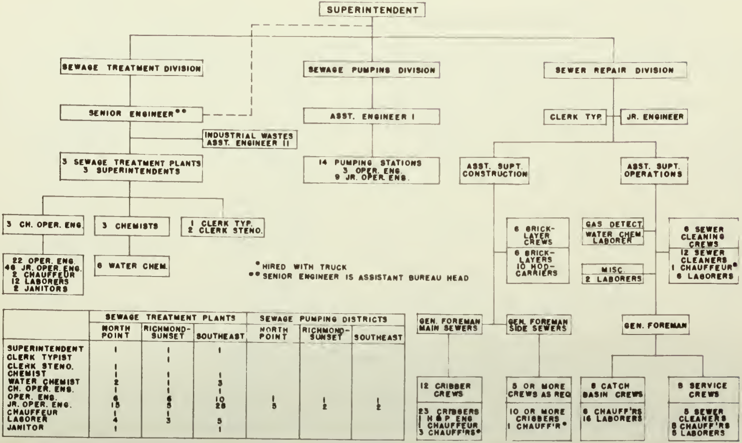
(Subject to minor adjustments as accounts are closed out)

Bureau	Expenditures from Bureaus Budgeted Funds For Bureau Work	Expenditures from Bureaus Budgeted Funds For Other Agencies	For Other Agencies at Their Expense	Total Expenditures
Building Repair (incl. Traffic Painting)	$3,435,434	$ 18,864	$ 736,969	$4,191,267
Street Cleaning (incl. Street Tree Planting)	2,265,252	48,745	---	2,313,997
Sewer Repair & Sewage Treat.	1,972,855	1,832	136,769	2,111,456
Street Repair (incl. Bridges & Tunnels)	1,700,275	87,214	---	1,787,489 (b)
Total Expenditures	$9,373,816	$ 156,655	$ 873,738	$10,404,209

(a) Expenditures made from the Bureau's budgeted funds; after which the General Fund or the Special Road Improvement Fund were appropriately reimbursed by Agencies served.

(b) Includes $77,598 of retirement charges applicable to other Special Road Improvement Fund functions (Gasoline Tax).

BUREAU OF SEWER REPAIR AND SEWAGE TREATMENT
ORGANIZATION CHART



*HIRED WITH TRUCK
**SENIOR ENGINEER IS ASSISTANT BUREAU HEAD

	SEWAGE TREATMENT PLANTS			SEWAGE PUMPING DISTRICTS		
	NORTH POINT	RICHMOND-SUNSET	SOUTHEAST	NORTH POINT	RICHMOND-SUNSET	SOUTHEAST
SUPERINTENDENT	1	1	1			
CLERK TYPIST		1				
CLERK STENO.	1					
CHEMIST	1	1	1			
WATER CHEMIST	2	1	3			
CH. OPER. ENG.	1	1	1			
OPER. ENG.	6	6	10	1	1	1
JR. OPER. ENG.	15	5	28	5	2	2
CHAUFFEUR	1	1				
LABORER	4	3	5			
JANITOR	1		1			

BUREAU OF SEWER REPAIR AND SEWAGE TREATMENT

W. B. Jones, Acting Superintendent

The Bureau of Sewer Repair and Sewage Treatment maintains and repairs public sewers and appurtenances, operates and maintains pumping stations and treatment plants, conducts sanitary surveys of shore waters, analyzes air samples for pollutants and regulates and controls industrial wastes discharges to sewers. Activities pertaining to sewers are under the Sewer Repair Division. Treatment plants and the control of industrial wastes are under the Sewage and Waste Treatment Division and pumping stations are under the Sewage Pumping Division. The Sewer Repair Division was assigned new responsibilities during the year in connection with Mosquito Abatement.

In addition the Sewage Treatment Division gives advisory and technical service to other departments of the City as listed below:

JUVENILE COURT DEPARTMENT

On operation of sewage treatment plant at Log Cabin Ranch in San Mateo County.

PUBLIC HEALTH DEPARTMENT

On the operation of the sewage treatment plant at Hassler Health Home in San Mateo County.

PUBLIC UTILITIES COMMISSION

On operation of sewage treatment plant at San Francisco International Airport in San Mateo County.

RECREATION AND PARK DEPARTMENT

On operation of sewage treatment plant in Golden Gate Park.

SHERIFF'S DEPARTMENT

On operation and improvements to sewage treatment plant at County Jail No. 2 in San Mateo County.

Budgeted employments for the fiscal year were 106 for Sewage Treatment, 13 for Sewage Pumping and 108 for Sewer Repair, totaling 227. These employments were supplemented by one junior engineer and one clerk typist for Sewer Repair and ten maintenance personnel for Sewage Treatment all from other Bureaus and Departments, and five chauffeurs hired with their trucks on a contractual basis by Sewer Repair. In addition, the Sewer Repair Division has a varying number of non-budgeted employments (20 are authorized) who perform new construction and repairs in connection with side sewers and who are paid by assessments against the effected property owners. Thus there are about 264 employments under the control of the Bureau.

The chart on the facing page shows the organization the Bureau by major functions and personnel.

On June 30, 1959, the following held supervisory in the Bureau:

SEWAGE TREATMENT DIVISION

K. Fraschina	Acting Senior Civil Engineer - Assistant Bureau Head
K. Fraschina	Superintendent, North Point Plant
B. S. Martin	Superintendent, Richmond-Sunset Plant
J. H. Crafts	Superintendent, Southeast Plant

SEWAGE PUMPING DIVISION

P. A. Esposito - Assistant Engineer

SEWER REPAIR DIVISION

W. J. Corwell - Assistant Superintendent
J. Murphy - Assistant Superintendent

Mr. B. Benas who had served as Superintendent of the Bureau since 1954 and whose ability and leadership are largely responsible for the present effectiveness of the Bureau, was appointed Purchaser of Supplies on April 1, 1959.

The budget expenditures for the fiscal year totaled $1,974,687 of which $1,027,807 was for the treatment plants and industrial wastes control, $109,196 for pumping stations and $837,687 for sewer maintenance and repair activities. In addition, the Sewer Repair Division expended $136,769 for side sewers paid for by property owners.

	Division		
	Sewage Treatment	Sewage Pumping	Sewer Repair
Personal Services			
Permanent Salaries*	$ 549,567	$ 76,585	$ 54,286
Overtime*	1,167	120	2,468
Holidays*	15,349	3,689	499
Temporary Salaries*	21,930	2,466	
Wages (per Diem)	92,752		633,098
Contractual Services			
Power and Gas	120,563	19,584	
Plant Equipment	32,260	3,276	
Field Equipment	3,525	133	27,614
Landscape Maintenance	16,288		
Miscellaneous Services	9,782	930	12,025
Hired Trucks			40,391
Material and Supplies			
Replacement Parts	19,514	458	508
Field	370		39,901
Plant	14,638	1,556	
Fuels and Lubricants	2,387	399	12,882
Treatment Chemicals	120,937		
Equipment			
New	263		10,671
Replacement	6,515		3,341
TOTAL	$1,027,807	$ 109,196	$ 837,684

* For Monthly Employees

The winter of 1958-59 was marked by unusually light rainfall. Therefore there were relatively few serious sewer breaks. However, there has been an increase in the number of minor sewer failures. This is rather difficult to account for. One possible explanation might be that the recent earthquakes, while not severe enough to do major damage, disturbed the soil enough to cause minor failures at weak points in the sewer system.

Industrial waste activities were again confined to industries where specific violations were indicated. In fact, such activities were further reduced in January by the untimely death of Mr. C. P. Ferraris who had served as industrial wastes engineer since the inception of the program in 1952. The Bureau, as of June 30, had been unable to obtain a replacement for the Industrial Wastes engineer and therefore, activities in this field have been on an emergency basis only.

Efficiency of sewer repairs was materially improved during the year through the acquisition of a combination back-hoe and front end loader. This device not only permits the saving of money on certain types of excavations but also reduces traffic hazards by speeding up the work in street excavations.

A program was instituted of photographing the interior of main sewers which cannot otherwise be inspected in order to determine their condition. About three miles of the North Point main main sewer from 10th and Harrison Streets to the North Point Sewage Treatment Plant were thus photographed. This sewer varies in diameter from 7' 6" to 8'6" and carries the flow from a large portion of the City. Due to the extreme dangers of entering this sewer, it had not been adequately inspected since its construction over fifty years ago. The results of the photographic work indicates that the sewer is generally in good condition. A location was discovered in the vicinity of Seventh and Howard Streets where the sewer had settled as much as three feet, apparently due to the general subsidance of the area. Although the photographs did not disclose any severe structural distress resulting from this settlement, the location should be carefully watched and occasionally rephotographed because a major sewer failure at this point could prove disastrous.

SEWAGE AND WASTE TREATMENT DIVISION

GENERAL

The Sewage and Waste Treatment Division operates the North Point, Richmond-Sunset and Southeast Sewage Treatment Plants, controls discharge of industrial wastes, and advises on operation of sewage treatment facilities under jurisdiction of other City Departments.

Operation of the three plants was continuous during the fiscal year except for limited shutdowns for planned repairs or construction. All San Francisco sewage is now being treated with the exception of limited areas along the bay shore. Sewage from these areas will be treated as soon as collecting sewers and pumping plants, now under construction or planned for the future, are completed. On August 5, 1958 the Sunnydale diversion and on September 11, 1958 the Rankin Street diversion in the Southeast district were completed. These diversions add about 985 acres to the Southeast plant drainage area, and will ultimately increase dry weather flow to the plant by about 2.1 mgd.

There were no personnel changes during the year.

Major bacteriological work is now being performed routinely at all three plant laboratories. In addition, the Southeast plant laboratory, in cooperation with the Bureau of Engineering, conducted an offshore sanitary survey from Mission Rock south to the County line to determine existing bay water conditions as affected by effluent from the Southeast plant.

As pointed out in previous reports, treatment plant operation is being seriously affected by lack of sufficient maintenance funds, which are not being increased commensurate with the age and needs of the plants. The backlog of required painting for equipment and structures is increasing and equipment cannot be maintained adequately with available machinists and replacement parts. In particular, one grit tank at the Southeast plant is in need of immediate rehabilitation and the three dryers are in need of a program of continuous maintenance.

The Bureau of Engineering performs engineering design for improvements. Major repairs and maintenance requiring the services of specialized crafts are done by other Department bureaus and by the Purchaser's shops. Landscaping at all plants is maintained by the Park and Recreation Department under transferred funds.

SEWAGE TREATMENT METHODS

Each plant provides primary treatment for the removal of oil, grease, floating material, grit and settleable solids. Grit from all plants and screenings from the North Point and Southeast plants are hauled by truck to the garbage fill south of the county line. Screenings from the Richmond-Sunset plant are incinerated. At the Richmond-Sunset plant, sludge is digested in two-stage digestion, elutriated, and dewatered by vacuum filtration. The filter cake is hauled to City parks for use as a soil conditioner. Raw sludge collected at the North Point plant is pumped to the Southeast plant where it is treated together with the sludge collected at the Southeast plant. Sludge treatment at the Southeast plant consists of thickening, two-stage digestion, elutriation, vacuum filtration and flash drying. A small quantity of the dried sludge is used as a soil conditioner by other City departments. the balance is sold under contract as surplus.

Sludge digestion used at the Richmond-Sunset and Southeast plants is a controlled anaerobic fermentation process which breaks down putrescible matter in sludge into relatively stable, inoffensive humus-like solid matter with release of water, production of gas, and decrease in number of pathogenic organisms.

The sludge produced has value as a soil conditioner. It can be readily dewatered by vacuum filtration and further heat dried in sludge dryers. The gas produced is nearly two-thirds methane and has high fuel value. It is used for digester and space heating and for screenings incineration at the Richmond-Sunset plant, and for digester heating and sludge drying at the Southeast plant.

Digesters are large circular reinforced concrete tanks, prestressed for additional structural strength, and provided with facilities for heating, seeding entering sludge, sludge mixing, and gas collection. Two-stage digestion is employed in Division plants. The first stage or primary tank holds the sludge during its period of greatest initial activity. The second stage or secondary tank provides space for consolidation and separation of the sludge. The primary tank is maintained at 95° F., the optimum temperature for sludge digestion; the second stage is unheated. The Richmond-Sunset plant has a 100 ft. diameter primary tank with 2,100,000 gallons capacity and a 80 ft. diameter secondary tank with 1,050,000 gallons capacity. The Southeast plant has two groups of five digesters, each group consisting of three 100 ft. diameter primary and two 100 ft. diameter secondary digesters with a capacity of 1,800,000 gallons per tank.

Capacity is provided for 30 to 45 days detention. During this period total solids are reduced nearly 50% and organic matter nearly 70%.

TREATMENT PLANT OPERATION

The following table summarizes data on flows, material removed, chemicals added and products handled, and power and gas purchased for the three plants.

SUMMARY OF TREATMENT PLANT OPERATION

	North Point	Richmond-Sunset	Southeast
Sewage Flow, million gal.			
Total (a)	16385 (b)	5454	6350
Avg day	44.9	14.9	17.4
Avg day, dry weather (c)	43.3	15.0	16.9
Max day, wet weather	95.7	19.2 (d)	29.3 (d)
Max day, dry weather	49.4	17.3	28.8
Max rate, wet weather	125	30 (d)	30 (d)
Max rate, dry weather	75	29	29
Screenings, cu ft			
Total	27988	8720	31102
Max day	238	52	524
Per million gallons	1.7	1.6	5.0
Grit, cu ft			
Total	61955	44874	43685
Max day	851	567	243
Per million gallons	3.8	8.2	8.5
Chlorination, lb (e)			
Pre	468720	103100	179270
Post	805860	504770	
Process water (effluent)	3600		
Total	1278180	607870	179270
mg per liter dry weather	11.5	14.4	12.2
Sludge Solids, M lb (dry)			
From sedimentation	24611 (f)		33233 (g)
To digesters (h)		7312	39020
Filter cake		1811	11348
Dried sludge			8477
Ferric Chloride			
Total, lb		87840	722840
% filter cake solids		4.85	6.37
Gas Production, M cu ft			
Total		41901	(i) 216124
Avg day		123	592
Power and Gas Purchased			
Power, total M kwh	5177.0	1809.6	4984.8
Power, avg/mo, M kwh	431.4	150.8	415.4
Natural gas, total C cu ft	69354	25190	114417
Natural gas, avg/mo, C cu ft	5780	2099	9535
Hauling			
Trips, grit and screenings	599		290
Trips, grit and filter cake		869	
Trips, dried sludge			148 (j)

NOTES

(a) For 365 days of operation at all three plants.

(b) Debris in Harrison St. sewer at 16th St. caused partial flow diversion to the bay until Sept. 5.

(c) Omits from consideration days with .01 inch or more rainfall and dry days following those with .05 inch or more rainfall.

(d) Flow restricted during storms to avoid overloading grit handling facilities.

(e) Pre-chlorination continuous at North Point and Richmond-Sunset except for brief shut-downs for repairs. Post-chlorination at North Point March through November and during extended periods of dry weather in winter months. Post-chlorination continuous at Richmond-Sunset except during storms. Pre- and post-chlorination combined for 113 days at Southeast plant; all chlorination discontinued after December 31 because of insufficient funds.

(f) Reduced from previous years by control of several sources of industrial wastes.

(g) Includes recirculating load from raw sludge thickening and digested sludge elutriation overflows.

(h) From raw sludge thickening.

(i) For 341 days; gas production not recorded on 24 days because gas booster or gas meter inoperative.

(j) Hauling 866.1 tons used by City. Contractor hauled 3352.2 tons sold to him at $1.10 per ton.

RESULTS OF OPERATION

Bay and ocean waters in the vicinity of the treatment plant outfalls and at nearby beaches remained in excellent condition during the fiscal year. Waters are safe for bathing along the ocean beach and nearby north shore beaches, and at Aquatic Park at all times except when storm overflow occurs during the winter season. Bay waters in the vicinity of Islais Creek continued to meet State Regional Water Pollution Control Board requirements.

COST OF OPERATION

Total expenditure for the fiscal year was $1,027,807. The cost was distributed as follows:

Personal Services	$680,765
Heat, Light and Power	120,563
Contractual Services	61,855
Materials and Supplies	157,846
Equipment	6,778

Based on a connected population of 770,000 the cost of operation was approximately $1.33 per capita.

MAJOR MAINTENANCE

The following major maintenance contracts for the treatment plants were awarded during the year. Work done under contract by the Bureau of Engineering is indicated by the symbol (E).

NORTH POINT PLANT:

Reconstruction of "B" and "D" lift pump motors to correct failure to reach synchronous speed.

SOUTHEAST PLANT:

Reconstruction of sludge dryer No.3, including relining cyclones, new drying tower and air locks, and repairs to cage mill(E).

Renewal of tank in grit washer (E).

Rebuilding one vacuum filter sludge conditioner (E).

Installation of scum separator and conveyor on sludge line from digestion to elutriation (E).

IMPROVEMENTS

Only one major improvement was made at the treatment plants during the year. This consisted of alteration to the bottom slope of the sludge tanks at the North Point plant to permit better draining and scum removal.

SPECIAL STUDIES AND INVESTIGATIONS

1. **Completed:**

Effect of varying rate of preaeration before sedimentation on sulfides, pH, dissolved oxygen, chlorine demand, and on removal of grease, suspended solids, and 5-day BOD.

Study of source and control of odors in the Channel St. estuary for the Bureau of Engineering.

Salinity, temperature, dissolved oxygen, coliform density, and bottom benthos profiles on offshore waters in Southeast district in cooperation with Bureau of Engineering.

Analysis of industrial wastes discharged to bay from San Francisco airport for Public Utilities Commission.

Investigation of demulsifying agents for surface oil removal in pump sumps.

Relation between dryer cyclone temperature and moisture content of heat dried sludge.

Cooperative study of methods for determining hydrogen sulfide in digester gas and synthetic detergents in sewage for the Standards Method Committee of the Federation of Sewage and Industrial Wastes Association.

2. **In Progress:**

Effect of mechanical flocculation on sedimentation.

Comparison of dacron, dynel, and wool as blanket material for vacuum filters.

Cause of excessive dissolved oxygen depletion in dilution water used in 5-day BOD test at North Point plant.

Means of correcting excessive grease deposition in Fishermans Wharf area sewers.

Study of identification of ground water in various parts of the City.

Check on technique of standard air oxidant collection method.

3. **Continuing:**

Source identification in leak and seepage complaints received by the Bureau.

Analysis of industrial wastes.

Chemical and bacteriological survey of shore waters.

4. **Air Pollution:**

The Richmond-Sunset plant, in cooperation with the Bureau of Air Sanitation, California State Department of Public Health, continued to collect detailed records of wind direction and oxidant values comprising a base level of air pollutants reaching San Francisco and corresponding values for portions of the City in which the air has become polluted in varying degrees. All data collected was supplied to the Bay Area Air Pollution Control District. The plant superintendent continued to act as technical adviser to Supervisors William C. Blake and Clarissa S. McMahon, Board members of the Bay Area Pollution Control District.

A program for the analysis of the data collected is now in use, planned in conjunction with the use of available IBM equipment.

INDUSTRIAL WASTES

Activities in the control of industrial wastes were brought to a virtual standstill early in the fiscal year by the fatal illness of the engineer in charge of this work. This work has been carried on by one person since the inception of the program in 1952. During that time the work has been held to a minimum. Several unsuccessful attempts have been made to have additional employments budgeted in order that a satisfactory control of industrial wastes might be maintained. As yet it has been impossible to refill the position using Civil Service procedures and it has not been considered desirable to fill the position temporarily on a non-civil service basis because of the length of time which would be required for the employee to become familiar with the work. Therefore, since the vacancy, only emergencies have received attention.

SEWAGE PUMPING STATIONS

GENERAL

This division of the Bureau of Sewer Repair and Sewage Treatment operates and maintains fourteen sewage pumping stations which are divided into three districts, corresponding to present districts tributary to the sewage treatment plants. The primary purpose of these stations is to boost sanitary flow and some storm run-off from low lying areas of the City which cannot be drained by gravity, into main interceptors leading to treatment plants.

At present, the Fourth Street Station is under construction and is expected to be completed March 1, 1960.

PERSONNEL

No change during fiscal year. The following tables show distribution of personnel and stations by districts:

DISTRICT	STATIONS
North Point	
1 Operating Engineer	Hyde
5 Jr. Operating Engineers	Commercial St.*
	Marina*
Richmond-Sunset	
1 Operating Engineer	Fulton St.
2 Jr. Operating Engineers	Lakeshore
	Park Merced
	Pinelake
	Sea Cliff #1
	Sea Cliff #2
	Vicente St.
Southeast	
1 Operating Engineer	Fitzgerald Ave.
2 Jr. Operating Engineers	Hunters Point
	Mariposa Street
	Yosemite Ave.

* Assigned Shifts
Others roving assignments.

MAINTENANCE AND REPAIRS

Major repairs requiring the services of specialized crafts are done by other bureaus of the Department and the Purchaser's Shops.

IMPROVEMENTS

Under contract by the Bureau of Engineering.

Vicente Street Station revised to:

(a) reduce volume and extend main influent line to sump.
(b) alter existing pump room floor.
(c) provide sidewalk door and piping for sump access and ventilation.
(d) provide automatic alternate system for pump operation.

PROPOSED IMPROVEMENTS

Proposed improvements are the same as listed on Page 119 of 1956-57 Annual Report. Funds for these improvements were not allowed this fiscal year and will be requested again next fiscal year because of the urgency of the need.

EXPENDITURES

Table I shows individual expenditures and unit cost data.

SEWER REPAIR DIVISION

The Sewer Repair Division cleans sewers and catchbasins, maintains and repairs main sewers and structures, installs, and repairs side sewers, tests for explosive and other gasses and does other work related to operation and maintenance of the sewerage system. San Francisco offers problems with regard to the maintenance of a sewer system which are quite different from those found in the average community. The compact area, the hilly topography and the fact that the storm and sanitary drainage are largely combined into one system create problems which are quite distinctive.

There are over 850 miles of main sewers. A small part of the lower Market Street area and a few other isolated areas are served by separate sanitary and storm drain systems. Otherwise, the entire City is served by a combined system ranging from 6-inch diameter pipe to 3-compartment sewers with 7-1/2' by 10' compartments. Excess flow during storms is diverted to the bay or ocean through 16 outfalls.

Maintenance and repair activities are assigned to seven principal types of work unit listed as follows:

- Sewer Cleaning Units
- Service Units
- Eductor Units
- Main Pipe Sewer Units
- Bricklayer Units
- Side Sewer Units
- Gas Detection Unit

In addition, there are three types of subsidiary units whose primary function is to assist the above units in the performance of their duties. These are:

Material Trucks
Digging Unit
Compressor Unit

Table II shows work distribution, total expenditures by work units and unit costs where applicable. Unit costs do not include general department overhead and prorated allowance for equipment and are thus not directly comparable to previous years.

SEWER CLEANING

Sewer cleaning units clean main sewers, sumps and tanks at pumping stations and treatment plants, do miscellaneous work in connection with sewers and handle complaints occasioned by rains when service crews cannot handle all calls.

Sewers are normally cleaned by buckets dragged between manholes. Other methods employed are manual cleaning of sewers, and flushing and rodding of pipe sewers.

There are 6 sewer cleaning units each consisting of 2 sewer cleaners and one laborer and equipped with a specially designed 1-1/2 ton truck unit containing the necessary equipment such as buckets, cable and tuggers.

The crews spent 86.2% of the time cleaning sewers and 13.8% on other operations. During the fiscal year, 431,858 linear feet of sewer were cleaned, mainly on scheduled operations in the outer Sunset, Western Addition and Southeast sections of the City. The Fisherman's Wharf area was a problem and will probably continue to be until some satisfactory method is found to keep the grease from the restaurants from clogging the sewers.

EDUCTOR OPERATIONS

Eductor crews clean catchbasins, pump out basements and sumps, pump flow during main sewer repairs, wet down backfill where hydrant water is not accessible and do other miscellaneous sewer work.

Catchbasins are cleaned by truck mounted Elgin eductors powered by 80 H.P. gasoline engines driving sand pumps. Solids removed are collected in a 1500 gallon tank on the eductor. The solids and liquid are disposed of at dumps. Attachments and valving make the eductor adaptable for direct pumping and high pressure flushing.

An eductor crew consists of one chauffeur and two laborers. The City is divided into 8 districts each of which is normally serviced by one of the 8 eductor crews. 10 eductors are available thus allowing for two standby machines.

Crews spent 74% of the time cleaning catchbasins and 26% on other work. A total of 18,123 basins were cleaned mostly on a regular scheduled basis. Non-scheduled cleaning is required when basins become plugged due to abnormal conditions or when they constitute an odor nuisance due to some unlawful refuse disposal.

A practice was instituted during the summer months of spraying each catchbasin cleaned to prevent the breeding of mosquitoes.

SERVICE CREWS

Service crews service complaints from the public and other sources, wet down main and side sewer backfills, flush sluggish or temporarily plugged pipe sewers, establish the necessity for specialized work by other crews and do miscellaneous emergency work.

Each of the 5 crews consists of one sewer cleaner, one chauffeur and one laborer and uses a one-ton truck with a special utility body equipped with hoses, lights, barricades, and other tools and equipment. Four of the crews are on regular day work and one is on night work. Weekend work is scheduled only during impending wet weather.

Service crews spent 51% of their time on service calls and 49% on other work. During the fiscal year a total of 11,469 calls were made, 6,287 on complaints and 5,182 on other work.

The following tabulation shows the breakdown of work done by type of work and number and percent of calls:

	CALLS			
TYPE OF WORK	NUMBER		PERCENT	
Relieved clogged sewer	2,910		25.4	
Found trouble inside property	693		6.0	
Wet down construction backfill	286		2.5	
Determine if side sewer exists	244		2.1	
Found side sewer broken	218	4,351	1.9	37.9

	CALLS			
	NUMBER		PERCENT	
Main Sewer				
Found main sewer broken	477		4.2	
Relieved clogged sewer	512		4.5	
Examined condition	434		3.8	
Wet down construction backfill	292	1,715	2.5	15.0
Catchbasins and Manholes				
Remove obstruction	432		3.8	
Replace cover	294		2.6	
Silenced noisy cover	302		2.6	
Examined condition	162	1,190	1.40	10.4
Miscellaneous				
Service light and barricades	960		8.4	
Investigate seepage and leaks	543		4.7	
Clean at pumping stations	381		3.3	
Not classified	288		2.5	
Deliver materials to job	188		1.6	
Remove deposits on sidewalks	98		0.9	
Mosquitoes	1,755	4,213	15.3	36.7
Total		11,469		100.0

A comparison of the above with the report of the previous year reveals that a major item was added to the Division work load with the responsibility for mosquito complaints originating in street areas. No additional equipment or personnel was made available to compensate.

MAIN PIPE SEWERS

Cribbing crews excavate, lag and backfill main sewer trenches; lay pipe in the 6 and 8 inch sizes; excavate, lag and backfill for construction or repair of structures; cut pavement; and do miscellaneous work.

Main pipe sewer repairs are mainly required on vitrified clay pipe. Breaks occur from scour, open joints, settlement, or poor house connections. Scour is prevalent on streets with steep slopes serving previously undeveloped areas; open joints and settlement occur mainly in old sewers; and poor house connections are found when the connection was made by private contractors before regulations required City installation or inspection.

When it is available and conditions are right for its use, the heavy excavating is done with the assistance of the digging unit. Otherwise it is done by hand. Wooden lagging is normally placed horizontally. Vertical lagging is used in deep trenches and where the water table extends into the excavation. Attempts were made to use metal lagging but with limited success due to the difficulty of fitting the lagging around other interfering utilities that are frequently found in excavations.

There are 11 cribbing crews, each consisting of 2 cribbers. However the organization of the cribbing units is quite flexible and a crew may be supplemented by laborers or additional cribbers as conditions may require.

During the year, 7,031 linear feet of sewers were replaced or repaired at 394 locations. This represents a considerable reduction as compared with the previous year. However, it should be noted that there was an increase in work on brick sewers and structures for which excavation is performed by these units.

BRICKLAYER WORK

Bricklayer crews repair main brick sewers, construct and repair manholes and catchbasins, lay pipe over 8" in diameter and do miscellaneous brickwork where required.

Underground crews consist of one bricklayer and two hodcarriers. Top crews have one bricklayer and one hodcarrier. There are normally two top crews and 4 underground crews. A 1-1/2 ton truck is assigned to each of the two top crews.

During the year, 19,048 linear feet of brick sewer were repaired, 26 structures were built, 969 structures were repaired and 2 repairs were made to concrete sewers.

SIDE SEWERS

Side sewer crews excavate, lag and backfill side sewer trenches and lay sewer pipe. Two cribbers normally constitute a crew but may be supplemented by laborers or additional cribbers when required. The number of crews employed depends on the number of side sewers being built or repaired. At present there are about six crews two of which are motorized. In the case of the motorized units, the trucks carry sufficient tools, equipment and material to complete a job and move without delay. Non-motorized crews must be moved to the job and have materials delivered.

The side sewer from the building to the main sewer belongs to the property owner. By City Ordinance all installation and repair work under City streets on side sewer connections must be performed by this Bureau except where side sewer construction is included with main sewer construction under public contract. Before any work is started the property owner deposits with the Central Permit Bureau the estimated cost for constructing or repairing that portion of the side sewer located in the street area. Final payment covers only actual cost.

During the year 354 side sewers were installed, 158 side sewers were repaired and 43 connections were made.

GAS DETECTION

The primary function of the gas detection unit is to conduct a continuing City-wide testing and inspection survey of the sewage system. Tests for explosive and toxic gases are made at sewer manholes and at special locations such as pumping stations and sewage treatment plants. The gas most frequently detected is methane which in nearly all cases results from leakage in gas mains and services. Explosive concentrations of over 1% methane detected in sewer manholes are reported immediately to the gas utility responsible for the leakage. Toxic gasses (hydrogen sulphide and carbon monoxide) are less frequently detected in the City sewer system because of the short sewer runs and high flow velocities.

Upon completion of gas tests each manhole is inspected to determine structural and flow conditions. The necessity for repairs or cleaning is reported to those responsible.

This unit also tests and reports on certain types of industrial wastes discharge, particularly the discharge of gasoline and combustible solvents. The unit assists in the location of hidden structures such as buried manholes and sewer pipe. This unit serves as the safety advisor to the Division and instructs personnel in the proper use of gas masks and other safety equipment.

An additional function which has been assigned to the unit is the supervising and assisting the contractor in the photographing of the interior of sewers, which activity is discussed elsewhere in this report.

Since this service was instituted, one complete survey of the sewage system was completed. The second survey which was started in February 1957 is now about 85% complete.

The unit consists of a special truck equipped as a mobile laboratory manned by a water chemist and a laborer.

During the year 6,722 manholes were tested; 96 had concentrations below limits considered explosive (0.15% to 1% methane); 44 contained methane in concentrations considered dangerous (1% to 15% methane); one manhole contained carbon monoxide, 3 contained hydrogen sulphide and 3 were deficient in oxygen.

The reason that there were fewer manholes tested than during the previous year is that a large amount of the time of the unit was taken up in the sewer photography program.

MATERIAL TRUCKS

Five trucks together with their drivers are hired on a contractual basis to assist in the work of the Division. These trucks haul materials to jobs, remove waste materials to dumps and move non-motorized units from one location to another. One of these trucks is assigned the duty of visiting all jobs on Saturdays, Sundays and holidays and seeing that all lamps and barricades are in proper order.

DIGGING UNIT

In April 1959 the new digging unit was put in service. The unit which is manned by an engineer of hoisting and portable engines consists of a combination front end loader and a back-hoe. The unit is used to assist the excavation of main sewer and side sewer work and for structure excavations. Its use has been avoided in locations where it is felt that there is danger of damaging other utilities and thus very little difficulty of this type has been experienced. The unit has proven to be of such great value that it is believed that in the future, additional similar units may prove desirable.

COMPRESSOR UNIT

This unit consists of a truck mounted compressor with its tools manned by two cribbers and a chauffeur. It is used to assist other groups, principally main sewer crews in opening streets for excavations.

TABLE I
SEWAGE PUMPING STATIONS

Location	Drainage Area In Acres	M.G. Pumped	Unit Cost Per M.G. Pumped Per					Expenditures				
				Contractual					Contractual			
			Salaries	Maintenance	Heat, Light & Power	Materials & Supplies	Totals	Salaries	Maintenance	Heat, Light & Power	Materials & Supplies	Totals
General			$ 1.56	$ .04	$	$ .02	$ 1.62	$ 6360.73	$ 143.36	$ 4.80	$ 100.61	$ 6,609.50
Commercial St.	93	303	57.96	2.24	3.78	1.25	65.23	17561.26	679.16	1145.36	377.47	19,763.25
Fitzgerald Ave.	30	14	66.30	5.06	12.33	3.43	87.12	928.29	70.80	172.70	47.83	1,219.62
Fulton St.	82	44	41.68	2.26	15.58	.90	60.42	1833.96	99.37	685.69	39.76	2,658.78
Hunters Point	90	117	21.14	.65	6.55	.67	29.01	2473.28	76.01	766.85	78.82	3,394.96
Hyde St.	14	28	68.52	32.99	6.25	3.19	110.95	1918.46	923.67	175.05	89.35	3,106.53
Lakeshore	152	128	39.68	1.82	9.82	1.60	52.92	5079.54	232.90	1256.85	204.76	6,774.05
Marina	1125	1960	8.52	.31	3.10	.26	12.19	16704.79	608.36	6083.51	511.42	23,908.08
Mariposa St.	117	234	20.44	.30	5.87	.57	27.18	4783.42	70.80	1373.76	132.35	6,360.33
Park Merced	212	228	18.62	1.35	13.27	.78	34.04	4246.36	307.54	3025.82	177.77	7,757.49
Pinelake	3	4	113.11	15.06	37.76	5.90	171.83	452.45	60.25	151.02	23.60	687.32
Sea Cliff #1	4	18	36.80	3.50	11.06	1.71	53.07	662.40	63.09	199.04	30.70	955.23
Sea Cliff #2	83	168	51.33	4.85	8.81	.97	65.96	8623.21	814.95	1480.53	163.57	11,082.26
Vicente St.	52	91	37.60	1.25	6.76	1.81	47.42	3421.82	114.05	614.83	164.82	4,315.52
Yosemite Ave.	527	736	10.58	.10	3.33	.38	14.39	7787.09	74.51	2448.32	281.87	10,591.79
Totals	2584	4073	$ 20.34	$ 1.07	$ 4.81	$ .59	$ 26.81	$82837.06	$4338.82	$19584.13	$2424.70	$ 109,184.71

TABLE II
SHOWING WORK DISTRIBUTION & COST—SEWER REPAIR DIVISION

Work Unit		Per-cent			Totals			Cost per Unit
1	Sewer Cleaning	86.2	Cleaning Sewers	89,247		431,858	Lin.Ft. Cleaned*	$ .21
		13.8	Other Work	14,327	103,574			
2	Eductor Operations	74	Cleaning Catchbasins	91,267		18,123	Catchbasins Cleaned	5.04
		26	Other Work	32,054	123,321			
3	Servicing	51	Servicing Complaints	49,184		6,287	Complaints	7.82
		49	Other Work	46,455	95,639			
4	Main Pipe Sewer Repairs	100	Repairing Sewers	143,220	143,220	7,031	Lin.Ft. at 394 Locations	20.37
5	Repairing Brick Sewers	64	Repairing Brick Sewers	84,079		19,048	Lin.Ft. Repaired	4.41
		7	Building Basins	9,323		12	Basins Built	776.97
		8	Building Manholes	10,728		14	Manholes Built	766.27
		11	Repair Basins	13,903		555	Basins Repaired	25.05
		10	Repair Manholes	12,472		414	Manholes Repaired	30.12
			Concrete Sewers	377	130,882	2	Locations	188.61
6	Side Sewer Work		Installations	99,351		354	Installations	280.63
			Repairs	35,175		158	Repairs	222.63
			Connections	2,243	136,769	43	Connections	52.16
7	Gas Detection Survey	46	Testing Manholes	6,247		6,722	Manholes Tested	.93
		54	Other Work	7,229	13,476			
8	Maintaining and Repairing Structures	100	Maintaining and Repairing Structures	5,339	5,339		Not Applicable	
9	Miscellaneous			34,877	34,877		Not Applicable	
	Total Not Including Work Unit 6			650,338				
	Total for Work Unit 6			136,769				
	GRAND TOTAL				$787,107			

*This amount is not comparable with the previous year's report because the method of measuring footage cleaned was changed.

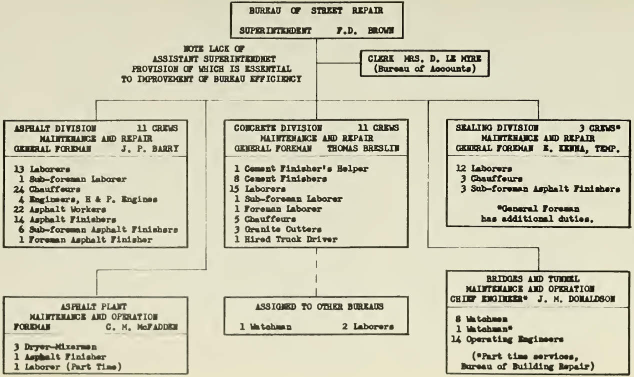
NOTE: The costs included here do not include overhead or other indirect charges and are therefor not comparable with the reports of previous years which did include such charges.

NEW DIGGING UNIT EXCAVATING MAIN SEWER TRENCH

NEW DIGGING UNIT EXCAVATING MAIN SEWER TRENCH

CITY AND COUNTY OF SAN FRANCISCO
BUREAU OF STREET REPAIR
DEPARTMENT OF PUBLIC WORKS

ORGANIZATION CHART AS OF JUNE 30, 1959



BUREAU OF STREET REPAIR

F. D. Brown, Superintendent

FUNCTIONS

The functions of the Bureau of Street Repair continue to be substantially as stated in previous reports:

Routine work includes the maintenance and repair of streets and appurtenant structures such as gutters, curbs, retaining walls, public stairways, pedestrian underpasses and over passes, guard rails and fences; the maintenance of City dumps; the maintenance and operation of lift bridges and tunnels.

Work ordered by the Director includes traffic channelization, minor street alterations, minor construction and emergency work for the protection of the City and/or the public.

Work performed for other departments or bureaus includes the repair of pavement in Municipal Railway track areas, the repaving of trenches opened by the Bureau of Sewer Repair for the installation or repair of side sewers, the repair of state highways within the City and the repair of pavements in school yards and the yards of other City institutions. The Bureau also performs other minor services of varied nature.

The City's charter provides that repair or reconstruction on any one job shall not exceed a cost of $2,000. It also prohibits work on unaccepted streets, except in emergency, and on sidewalks in front of private property. Unaccepted streets are those streets that have not been properly improved and officially accepted for maintenance and repair by the City.

Activities are further limited by state law governing the expenditure of monies from which the bureau is financed.

Maintained road mileage is as follows:

Secondary Streets	(Secondary Roads)	614.12 miles
Major Streets	(Primary Roads)	184.45 miles
State Highways		14.37 miles
	TOTAL	812.94 miles

Inasmuch as San Francisco is a combined city and county, its street and road systems are one and the same.

ORGANIZATION AND PERSONNEL

No change was made in the bureau's organization during the year. Changes in personnel were confined to natural "turn-over". An organization chart is included as a part of this report.

The retirement of a general foreman, January 1, 1959, preceded by several months sick leave, combined with rules governing temporary appointments, caused considerable disorder. As there was no established civil service list for the classification, it was necessary to fill the vacancy by temporary appointment. These appointments, two of ninety days each, caused "chain promotions" involving three other classes.

Major weaknesses in the bureau's organization and personnel are lack of an assistant superintendent and one engineer of hoisting and portable engines.

SUPERVISION

General supervision of the bureau is limited to one superintendent. Repeated budget requests for provision of an assistant have failed to receive approval; so far, there has been no indication that consideration is being given to the reclassifying of one position of General Foreman of Street Repair as requested September 4, 1958. Although three general foremen now provided are fully needed as such, sacrifice of one for an assistant superintendent would afford some improvement. General supervision and attendant office work are not within the scope of duties of general foreman. This problem has been described in considerable detail in each of the past several reports.

EQUIPMENT

The only new equipment procured during the year was a Littleford Model 90-X, trailer mounted, portable tool heater with kerosene burners. This tool heater replaced a wheelbarrow with open wood and coal fire used for heating asphalt working tools. The unit is assigned to the machine resurfacing crew.

Eight eleven-year-old four-wheel dump trucks of approximately 28,000 pounds gross vehicle weight were replaced with eight six-wheel dump trucks of 35,000 pounds gross vehicle weight. Although the increased capacity of the new trucks is highly desirable, the prime motive for changing to six-wheelers was to provide legal means for transporting reasonable loads over state highways and freeways. New trucks are International Model RF 192.

MUNICIPAL ASPHALT PLANT

Asphaltic mixtures produced at the Municipal Asphalt Plant during 1958-59 were as follows:

Mix Designation	Tons	COMPOSITION - % Asphalt	#6	5/16"	5/8"	1-1/4"
Surface	3,732	8-1/2	91-1/2	-	-	-
School	5,625	7	60	33	-	-
Topeka	39,549	6	45	25	24	-
Spreader	6	5-1/2	40	25	17-1/2	12
Binder	751	3-1/2	21	28	22-1/2	25
Cold	134	*	35-1/2	27-1/2	30-1/2	-
Total	49,797					

*1/2% asphalt and 6% Pacific specification 300 fuel oil.

Aggregates were screened into the four "hot bins" from a combination of Antioch (fine graded) sand, coarse graded sand and three sizes of gravel.

Production costs for the 49,797 tons produced during the year were as follows:

Direct Labor	$ 39,531	or	$ 0.80	per ton
Indirect Labor	1,659	"	.03	" "
Overhead	9,142	"	.19	" "
Materials	195,307	"	3.92	" "
Gas, Electricity, etc.	15,584	"	.31	" "
Total	$ 261,223	"	$ 5.25	per ton

There were no plant break-downs during the year.

Maintenance and repair consisted of the usual cleaning, checking and tightening of mechanical equipment; the replacement of minor parts; the building up or replacing of worn parts and painting. Other than "touch-up", painting was confined to the dust collecting cyclone, wet tube washer and stack.

EXPENDITURES

Accompanying tabulations show expenditures for each of the several budgeted items for each of the past five years. Percentage increases for road repair costs, wage rates and materials prices are shown for "Street Repair" and percentage increases for bridge and tunnel maintenance and operation costs and for salary rates are shown for "Bridges and Tunnel".

EXPENDITURES—STREET REPAIR

BUDGET ITEM	1954 - 55	1955 - 56	1956 - 57	1957 - 58	1958 - 59
Permanent Salaries	$ 40,955	$ 32,553(a)	$ 34,674	$ 37,467	$ 38,904
Allowance for Overtime	48	239	96	163	59
Allowance for Holidays	534	462	491	582	771
Temporary Salaries	208	196	567	387	1,346(b)
Wages	646,058	666,307	741,171(c)	828,883(c)	885,892
Contractual Services	80,173	86,982	100,535	84,244	86,306
Auto Mileage - Employees' Cars		76	80	61	22
Truck Hire	52,278	53,976	36,115(c)	10,271(c)	11,507
Materials & Supplies	171,461	207,512(d)	225,332	250,736	257,132
Equipment	30,002	25,388	51,836	48,224	93,286
Accident Compensation (e)	6,636	12,073	7,889	8,187	12,801
Retirement Allowance (e)	152,129	161,981	177,237	202,207	206,886
Allowance for Medical Plans					2,849
Services of Other Departments	9,006	14,565	17,812	19,787	21,181
Retroactive Wages	3,482	135	-	-	-
Sub-Total	$1,192,970	$1,262,445	$1,393,835	$1,491,199	$1,618,942
Improvements	371,522	38,837	16,292	3,158	
Gross Expenditures	$1,564,492	$1,301,282	$1,410,127	$1,494,357	$1,618,942
Road Repair Costs: % Increase:					
Over Previous Year		6.4	8.3	6.5	6.3
Over 1954-55		6.4	15.2	22.7	30.5
Wage Rates: % Increase:					
Over Previous Year		4.2	9.6	7.0	6.5
Over 1954-55		4.2	14.3	22.3	30.2
Materials Prices: % Increase:					
Over Previous Year		12.8	5.3	12.8	2.0
Over 1954-55		12.8	18.8	34.0	36.6

(a) Two operating engineers deleted when new asphalt plant was put into service.
(b) Sick Leave replacement for retiring General Foreman.
(c) Six hired trucks replaced with City owned trucks.
(d) New asphalt plant permitted increased production.
(e) Includes allowance for other Bureaus and Departments.

EXPENDITURES—BRIDGES AND TUNNEL

BUDGET ITEM	1954 - 55	1955 - 56	1956 - 57	1957 - 58	1958 - 59
Permanent Salaries	$ 112,220	$ 110,232(a)	$ 114,986	$ 120,242	$ 123,669
Allowance for Overtime	31		12	43	17
Allowance for Holidays	3,562	3,537	3,714	5,790(b)	5,687
Temporary Salaries	6,425	10,148	13,560	10,167	13,151
Contractual Services	18,814	17,377	17,170	21,428	16,389
Materials & Supplies	2,731	2,622	2,073	1,206	1,184
Equipment					
Services of Other Departments	6,714	6,541	7,992	8,557	8,450
Total Expenditures (c)	$ 150,497	$ 150,457	$ 159,507	$ 167,433	$ 168,547
Expenditures: % Increase					
Over Previous Year		-	6.0	5.0	0.7
Over 1954-55		-	6.0	11.3	11.8
Salary Rates: % Increase					
Over Previous Year		2.9	5.8	5.1	4.0
Over 1954-55		2.9	8.9	14.4	19.0

(a) One part-time operating engineer released, watchmen substituted for operating engineer on tunnel three days per week.
(b) Rate increased from "straight time" to "time and one-half".
(c) Retirement Allowance, equivalent to approximately 12.5% of all salaries, is included in Street Repair budget.

WORK PERFORMED

	Unit	Quantity	Total Cost	Unit Cost
Asphalt Resurfacing - Hand				
Asphalt Paving	Sq. Ft.	42,579	$ 5,314	$ .125
	Ton	304		17.48
Reset Casting	Each	4	196	48.935
Total	Sq. Ft.	42,579	5,511	.13
(140.1 Sq.ft.per ton)	Ton	304		18.13
Asphalt Resurfacing - Machine				
Asphalt Paving	Sq.Ft.	5,308,686	273,292	.051
	Ton	31,999		8.54
Reset Casting	Each	391	19,134	48.935
Total	Sq.Ft.	5,308,686	292,426	.055
(165.9 Sq.ft.per ton)	Ton	31,999		9.14
Asphalt Resurfacing - Box				
Asphalt Paving	Sq. Ft.	816,246	65,780	.081
	Ton	4,828		13.62
Reset Casting	Each	47	2,300	48.935
Total	Sq. Ft.	816,246	68,080	.083
(169.1 Sq.ft.per ton)	Ton	4,828		14.10
Asphalt Patching				
Asphalt Patching	Sq. Ft.	808,298	184,060	.228
	Ton	4,996		36.84
Compressor Work (Cut out)	Sq. Ft.	275,771	34,615	.126
Asphalt Paving (Cut out)	Sq. Ft.	359,778	91,659	.255
	Ton	4,231		21.66
Clean up (Cut out)			60,176	
Total	Sq.Ft.	1,168,076	370,510	.317
	Ton	9,227		40.15
Curb Reset and Replaced				
Compressed Work	Lin.Ft.	27,239	26,787	.983
Granite, Reset	Lin.Ft.	11,567	15,099	1.305
Replaced	Lin.Ft.	2,820	3,877	1.375
Concrete, Reset	Lin.Ft.	10,614	12,141	1.144
Replaced	Lin.Ft.	734	2,860	3.896
Pavement, Asphalt	Sq. Ft.	15,691	12,522	.798
Concrete	Sq. Ft.	314	391	1.245
Sidewalk	Sq. Ft.	31,322	46,166	1.474
Clean up	Lin. Ft.	25,735	46,997	1.826
Total	Lin. Ft.	25,735	166,840	6.483

WORK PERFORMED—Continued

	Unit	Quantity	Total Cost	Unit Cost
Concrete Curb Repair			12,375	
Curb Yard				
Redress Granite Curb	Lin.Ft.	4,271	8,899	2.08
Sort, Move, etc.			8,306	
Total			17,205	
Crack Sealing				
Sealing	Lin.Ft.	2,144,282	140,166	.065
Clean up			30,341	
Total		2,144,282	170,507	.08
Manhole Casting Reset	Each	50	2,447	48.94
Concrete Pavement Repaired	Sq. Ft.	7,461	10,794	1.45
Sidewalk Reconstructed	Sq. Ft.	12,502	26,244	2.10
Traffic Stripes Removed				
Burn	Lin.Ft.	7,422	2,695	.363
Sandblast	Lin.Ft.	110	71	.645
Total	Lin.Ft.	7,532	2,766	.367
Mud Jacking			18,372	
Heater Planing	Lin.Ft.	150,598	21,644	.143
Slide and Debris Clean Up			22,010	
State Highways			11,914	
Asphalt Paving	Sq. Ft.	1,838		
Crack Sealing	Lin.Ft.	60,405		
Heater Planing	Lin.Ft.	31,937		
Work for Other Bureaus and Depts.			75,454	
Asphalt Paving	Sq. Ft.	138,168		
Concrete Paving	Sq. Ft.	10,863		

BRIDGES

Detailed description of bridges and bridge operation may be found in report for year ending June 30, 1954.

Bridge openings during the past five years were as follows:

	Third Street	Fourth Street	Islais Creek
1958-59	1203	757	1084
1957-58	1322	909	1492
1956-57	1185	629	1453
1955-56	800	290	1338
1954-55	950	372	1318

A considerable number of openings of the Third Street and Fourth Street bridges during the past three years can be attributed to the passing of sightseeing launches to and from their berths.

Openings of the Islais Creek Bridge during 1957-58 and 1956-57 included 305 and 334, respectively, for dredging purposes.

TUNNEL

The Broadway Tunnel was put into service in December 1952. Subsequent reports have included descriptions of its ventilating and lighting systems and other phases of its maintenance and operation. A review of these reports has disclosed minor inaccuracies and changes in procedure; revision and consolidation into one report appears to be desirable.

GENERAL DESCRIPTION

The tunnel is composed of twin tubes, each 1616 feet long, generally referred to as the "north bore" and "south bore". Interior cross-sections of the two tubes are identical, having semi-circular arch of 14'3" radius and vertical side walls 8'6" high. Roadways are 22 feet wide, between curbs; a four foot wide sidewalk, protected by a pipe railing; is elevated eighteen inches above the curb and to the right of the roadway. Spaces below sidewalks are occupied by utility pipes and conduits and are covered by checkered steel plates which form the walkway surface. A painted line divides each roadway into two traffic lanes.

Arch and wall lining is faced with ceramic tile; arch tile being of light yellow color and semi-matte finish, wall tile being of yellow color and glazed finish. Facing is composed of approximately 1,400,000 individual tiles each 4-1/4 inches square.

Approaches in open cut total 911 lineal feet.

There is a ventilation building over each end of the tunnel connected to the tunnel by stairways in the wall which separates the two bores. The east ventilation building contains operating headquarters, ventilating equipment for the north bore, all automatic controls and manual controls for practically all tunnel equipment and apparatus.

Ventilating, lighting, traffic signal, fire alarm and telephone systems will be described further on in this report.

Traffic counts made have been as follows:

	Eastbound	Westbound
Thursday, July 10, 1958	11,144	9,478
Wednesday, March 16, 1955	10,607	9,795
Monday, August 17, 1953	9,361	8,878
Wednesday, February 11, 1953	8,668	8,770

MAINTENANCE AND OPERATION

The maintenance and operation of the Broadway Tunnel is under the supervision of a Chief Operating Engineer whose part time service is secured from another bureau. The tunnel is continually manned by an Operating engineer on the day watch and a Watchman on each of two night watches.

The operating engineer is responsible for the maintenance of all equipment and the periodic testing of automatic systems. Watchmen are sufficiently familiar with controls to take emergency action in the event of a failure. Operators are normally stationed at operating headquarters in the east ventilation building but each makes two trips daily to the west ventilation building; tunnel appurtenances are checked enroute. Although there has been little need, operators are instructed to respond to telephone calls and fire alarms originating in the tunnel systems and to take such action as is necessary.

Other than cleaning, relamping and servicing traffic signals, there has been very little maintenance work required that could not be performed by operating personnel. Cleaning will be discussed as a separate subject; relamping and servicing of traffic signals will be included in descriptions of the lighting and traffic signal systems.

Additional maintenance performed as contractual services by others consists of minor water-proofing, the replacement of a few broken tiles and the painting of the west stair well and tunnel handrails. Painting was done in 1957-58.

CLEANING

To date, tunnel cleaning has been performed by the Bureau of Street Cleaning as a contractual service to the Bureau of Street Repair. Cleaning schedule and description of cleaning methods are being included in the former bureau's report.

It appears that a remarkable job has been done. When the tunnel was first put into service it was believed semi-annual steam cleaning, at a cost of approximately $12,000 per year, would be necessary. However, the Bureau of Street Cleaning undertook to do the job for the $5,000 appropriated for the purpose. Only recently, after about six years, have deposits built up beyond the capacity of the treatment used.

In the coming year it will be recommended that available funds be used for steam cleaning, after which it is believed a less expensive method will suffice for several years. Additional cleaning during the year will have to be done as a street cleaning function.

New cleaning solutions and equipment are being developed constantly. Further study of the cleaning problem will continue as time permits.

VENTILATION

North bore ventilation is provided by two 150,000 cfm blowers driven by two-speed 75/19 HP motors housed in a building over the easterly end of the tunnel; south bore ventilation is provided by two 53,000 cfm blowers driven by two-speed 15/4 HP motors housed in a building over the westerly end of the tunnel. Pressurized air is introduced into the tubes through "nozzles" formed by depressed arch sections approximately 160 feet from the entrance portals. The two systems are independent of each other but both are controlled from operating headquarters in the east ventilation building.

Capacities of the systems were designed to supplement partial ventilation created by passing vehicles. It was anticipated that up grade west bound traffic would generate approximately .07 cfm of carbon monoxide in the north bore and down grade east bound traffic would generate approximately .04 cfm of carbon monoxide in the south bore. Tunnel ventilation is also affected by wind; prevailing winds being westerly.

Tunnel air, drawn through pipes from openings in the walls near the midpoint and exit portals of each tube is continuously analyzed by four recording carbon monoxide analyzers, two for each bore, located in the east ventilation building. Blowers are controlled automatically and are operated at various combinations of speed and number according to the concentration of carbon monoxide being recorded. The "concentration" is referred to as the number of parts of carbon monoxide in 10,000 parts of air.

One blower goes into operation at slow speed when the carbon monoxide concentration reaches "1". If the tunnel air is not cleared within a predetermined time, presently set at five minutes for the north bore and seven minutes for the south bore, the second blower goes into operation at slow speed. If the carbon monoxide concentration rises to "2", one blower stops and the other goes to high speed; at a concentration of "2.5", both blowers go to high speed. A concentration of "4" is considered to be the danger point. If this degree of carbon monoxide concentration is reached, both blowers continue to operate at high speed, an audible signal is sounded and traffic control lights are automatically set to prevent traffic from entering the tunnel. As the tunnel air is cleared the above cycle is reversed.

Serious damage might occur if a blower motor was started while rotating backward. To prevent backward rotation caused by wind, each blower is equipped with a damper curtain which is automatically raised or lowered when the blower motor is started or stopped.

Only once during the six and one-half years that the tunnel has been in service did the ventilation system fail to keep the carbon monoxide concentration below the danger point of four parts in 10,000 parts of air. On May 27, 1957, westbound traffic was halted or detoured from 5:30 p.m. to 5:35 p.m. The ventilating system and interconnected traffic control system worked as designed.

Hours of operation of the various ventilating blowers, with similar information for 1957-58 shown in parenthesis, were as follows:

	SLOW SPEED		FAST SPEED	
	Hours	Percent of Time	Hours	Percent of Time
No. 1, North Bore-Westbound traffic	(145.8) 119.8	1.37	(4.5 3.0	.03
No. 2, North Bore-Westbound Traffic	(135.5) 110.5	1.26	(5.5) 2.6	.03
TOTAL	(281.3) 230.3	2.63	(10.0) 5.6	.06
No. 3, South Bore-Eastbound Traffic	(18.9) 18.7	.21	(10.0) 16.1	.18
No. 4, South Bore-Eastbound Traffic	(18.8) 20.8	.24	(13.6) 17.8	.20
TOTAL	(37.7) 39.5	.45	(23.6) 33.9	.38

LIGHTING SYSTEM

Tunnel lighting is provided by fluorescent tubes enclosed in a continuous line of fixtures mounted on a steel race-way along the center line of the arch. Plastic fixture bottoms, in metal frames hinged to facilitate relamping, diffuse light, damp-proof fixture and safeguard against loose tubes falling on passing autos. In each bore there are 668 lamps contained in 251 fixtures.

Each bore is divided into three sections -- entrance, middle and exit -- for lighting purposes. Each fixture contains two 72T8 "Slimline" fluorescent tubes with ballasts to provide 26 watts; in addition, fixtures in the entrance section each contain one 72T12 "Slimline" tube with ballast for 55 watts and fixtures in the middle section each contain one 72T12 tube with ballast for 38 watts. All 26 watt lamps burn continually; 55 watt and 38 watt lamps are automatically illuminated in the morning and extinguished in the evening their purpose being to provide an easier transition from daylight to tunnel level of illumination.

The entrance and middle sections of the north bore and the exit section of the south bore are controlled from a switchboard in the east ventilation building. The entrance and middle sections of the south bore and the exit section of the north bore are controlled from a switchboard in the west ventilation building. Several circuits are so routed that if one fails only one half of the lights go out in the section served.

Relamping has not been as great a problem as it was anticipated to be. The following table shows the number of occasions and the number of lamps replaced each year since the tunnel was put into service:

Year	Occasions	72T8's		72T12's		TOTAL	
		Year	to Date	Year	to Date	Year	to Date
1952-53	-	-	-	-	-	-	-
1953-54	7	381	381	-	-	381	381
1954-55	7	893	1274	-	-	893	1274
1955-56	7	782	2056	89	89	871	2145
1956-57	4	424	2480	67	156	491	2636
1957-58	5	659	3139	12	168	671	3307
1958-59	4	486	3625	17	185	503	3810

Lamp ratings are 6,000 hours for 72T8's and 7,500 hours for 72T12's.

It is not necessary to close the tunnel to traffic during relamping operations. A portable scaffold mounted on a low-bed truck provides a safe platform for the workmen and is so constructed that the truck occupies only one of the two traffic lanes. Work is not started until after heavy morning travel has subsided.

The relamping crew is composed of two electricians, a chauffeur, two laborers and a labor foreman. The two electricians do the actual relamping and incidental fixture maintenance; the chauffeur operates the truck; one laborer receives discarded lamps from and passes new lamps to the electrician; one laborer places traffic direction devices and flags traffic; the foreman supervises operations and keeps the electrician's truck a short distance to the rear of the relamping truck, as a "buffer" against approaching traffic.

TRAFFIC SIGNAL SYSTEM

The tunnel traffic signal system consists of standard red-yellow-green signals and control boxes at the entrance portal, the one-third point and the two-thirds point of each bore. In addition, a signal and control box are located in the east approach where a service road permits the by-passing of westbound traffic. Signals at the two intersections away from each end of the tunnel are also tied into the tunnel system.

Complexities of the automatic and manual controls will not be described here. It should suffice to say that automatic controls are actuated by carbon monoxide recorders and fire alarms. "Tell-tale" lights and audible alarms in the east ventilation building keep the operator informed regarding the setting of the signals.

The traffic signal system is serviced and maintained by the Department of Electricity as a contractual service to the Bureau of Street Repair.

FIRE ALARM SYSTEM AND FIRE PROTECTION

The tunnel fire alarm system is comprised of nine auxiliary alarm boxes about 280 feet apart in each bore and approach and appropriate controls, signals and relays. A master box connected to the City system is located adjacent to the auxiliary box nearest each exit.

"Pulling" an auxiliary box actuates the master box which signals the Fire Department and automatically sets traffic signals to prevent traffic from entering the bore. An audible alarm in each ventilation building alerts the operator and tell-tale lights show him the approximate location of trouble.

Systems are continually energized to assure they are in proper working condition. Audible alarms and tell-tale lights warn the operator of any break in the circuit.

In addition to the fire alarm system, fire protection is provided by fire hydrants and fire extinguishers.

There are seven San Francisco standard fire hydrants in each bore, in line with the sidewalk protecting handrail; one just inside each portal, the others equally spaced.

There are sixteen carbon-dioxide type fire extinguishers recessed into the wall at convenient locations along each bore and approach.

TELEPHONE SYSTEM

The tunnel telephone system consists of nine handsets in each bore connected to office telephones in the east and west ventilation buildings. Telephones are mounted in Police type call boxes, without locks, recessed into the walls adjacent to fire alarm boxes.

The system is entirely local. Any message, such as a call for police or ambulance, must be relayed by the tunnel operator.

ITEMS OF INTEREST IN PREVIOUS REPORTS

It is not practical to describe all plant and work methods in each annual report. It is intended that partial description each year will cover the subjects within reasonable time. Description of features not covered in this report may be found in previous reports as listed below.

Title	Report for Year Ending June 30		
Source of Funds		1953	1958
Resurfacing	1955	1957	1958
Heater-Planer Operation			1957
Curb Resetting and Replacing			1956
Mud-jacking			1956
Municipal Asphalt Plant			1955
Bridges			1954

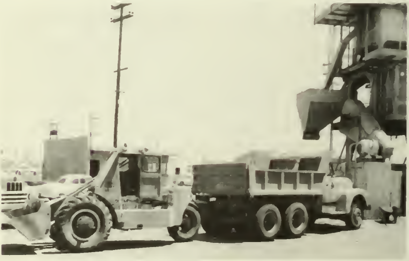
BUREAU OF STREET REPAIR
REPORT OF OPERATIONS
1958-1959

	Unit	Quantity	Total Cost	Unit Cost
Asphalt Resurfacing - Hand				
Asphalt paving	Sq.Ft.	42,579	$ 5,315	$ .125
	Ton	304		17.48
Reset Casting	Each	4	196	48.935
Total	Sq.Ft.	42,579	5,511	.13
(140.1 Sq.Ft. per Ton)	Ton	304		18.13
Asphalt Resurfacing - Machine				
Asphalt paving	Sq.Ft.	6,124,932	339,073	.055
	Ton	36,827		9.21
Reset Casting	Each	438	21,434	48.935
Total	Sq.Ft.	6,124,932	360,507	.059
(166.3 Sq.Ft. per Ton)	Ton	36,827		9.79
Asphalt Patching				
Asphalt Patching	Sq.Ft.	808,298	184,060	.228
	Ton	4,996		36.84
Compressor Work (Cut Out)	Sq.Ft.	275,771	34,615	.126
Asphalt Paving (Cut Out)	Sq.Ft.	359,778	91,659	.255
	Ton	4,231		21.66
Clean Up (Cut Out)			60,176	
Total	Sq.Ft.	1,168,076	370,510	.317
	Ton	9,227		40.15

	Unit	Quantity	Total Cost	Unit Cost
Curb Reset and Replaced				
Compressor Work	Lin.Ft.	27,239	26,787	.983
Granite, Reset	Lin.Ft.	11,567	15,099	1.305
Replaced	Lin.Ft.	2,820	3,877	1.375
Concrete, Reset	Lin.Ft.	10,614	12,141	1.144
Replaced	Lin.Ft.	734	2,860	3.896
Pavement, Asphalt	Sq.Ft.	15,691	12,522	.798
Concrete	Sq.Ft.	314	391	1.245
Sidewalk	Sq.Ft.	31,322	46,166	1.474
Clean Up	Lin.Ft.	25,735	46,997	1.826
Total	Lin.Ft.	25,735	166.840	6.483
Concrete Curb Repair			12,375	
Curb Yard				
Redress Granite Curb	Lin.Ft.	4,271	8,899	2.08
Sort, Move, etc.			8,306	
Total			17,205	
Crack Sealing				
Sealing	Lin.Ft.	2,144,282	140,166	.065
Clean Up			30,341	
Total		2,144,282	170,507	.08
Manhole Casting Reset	Each	50	2,447	48.94
Concrete Pavement Repaired	Sq.Ft.	7,461	10,794	1.45
Sidewalk Reconstructed	Sq.Ft.	12,502	26,244	2.10
Traffic Stripes Removed				
Burn	Lin.Ft.	7,422	2,695	.363
Sandblast	Lin.Ft.	110	71	.645
Total	Lin.Ft.	7,532	2,766	.367
Mud Jacking			18,372	
Heater Planing	Lin.Ft.	150,598	21,644	
Slide and Debris Clean Up			22,010	
State Highways				
Asphalt Paving	Sq.Ft.	1,838		
Crack Sealing	Lin.Ft.	60,405		
Heater Planing	Lin.Ft.	31,937		

	Unit	Quantity	Total Cost	Unit Cost
Work for Other Bureaus and Departments			75,454	
Asphalt Paving	Sq.Ft.	138,168		
Concrete Paving	Sq.Ft.	10,863		

INTERNATIONAL RF-192's AWAITING LOADING AT ASPHALT PLANT—JUNE 1958



INTERNATIONAL MODEL RF-192 AND SCOOPMOBILE $1\frac{1}{4}$ CU.YD. MODEL H—JUNE 1959

BUREAU OF STREET CLEANING

B. M. Crotty, Superintendent

The Bureau of Street Cleaning is responsible for the cleaning of 1640 curb miles of improved streets and 87 curb miles of traffic islands. The Bureau is also responsible for maintenance of 60 acres of landscaped areas and parkways, plus 6000 street trees.

In the 10-year period, from 1950-51 until the present, Bureau responsibilities have increased by about 40% in scope with an increase of but one employee in the number of employments; exclusive of employments provided for the Street Tree Division, a new function transferred to this Bureau on July 1, 1955. The work-load increase was caused by the acquisition of the Street Tree Planting Division, the necessity of the hand weeding of city-owned land due to the burning ban, the cleaning of the Broadway Tunnel for the Bureau of Street Repair, and the cleaning up of careless disposal of waste from the thoroughfares. Although much of the operation is routine in that work is scheduled, the Bureau received in excess of 3000 mail and telephone requests for service during the year. Many of these requests were routinely handled by assignment of a crew or truck, but some required further investigation in order to properly dispose of them.

The Bureau collected and hauled to the dump 23,000 tons of waste this year. This material included such varied items as abandoned furniture and sacks of decomposed fish. Based on current costs, it is estimated that in excess of $400,000 annually is spent in removing illegally discarded material.

A change of personnel assignments involving the 325 non-supervisory operating employees of the Street Cleaning Division was accomplished during this year. A number of considerations demanded that this change be effected. Among these were dissatisfaction of the individual with his assignment and familiarity of an individual, or a crew, with an area which tended to encourage slipshod cleaning practices. This change, although seemingly a simple undertaking, necessitated much planning and shuffling of personnel. Once the Bureau decided to go ahead with this drastic change it required approximately 2 months' work to program the assignments. In order that the change would not be wasted effort, every new assignment had to be screened and double checked to be sure that no man was assigned to either his original detail or to one which would prove less advantageous for the Bureau.

Improvements in street surfaces and the reconstruction of curbs and gutters in recent years has proved to be a valuable service to the Bureau of Street Cleaning. In many areas prior to street reconstruction it was almost impossible to use mechanical sweepers.

BLOCKMEN

The Bureau has blockmen assigned to routes downtown and in the business sections of outlying residential areas. In the past year the number of blockmen has been reduced from 134 to 128. This reduction has been possible because of a survey which showed the motor sweeping could be substituted for hand sweeping in 4 areas of the City.

Three hand sweeping routes were eliminated in the outer Richmond and one in Ingleside Terrace. Four routes were eliminated in the outer Richmond and one in Ingleside Terrace. Four routes in the downtown area were lengthened, thereby releasing 2 more men. Two of the six blockmen whose routes were eliminated were assigned to 2 newly created routes. One of these new routes is on Noriega Street from 19th Avenue to the beach. The other new route is on Page Street from Stanyan to Broderick, including the north and south side blocks. The remaining four men were assigned to gangs in order that those gangs working shorthanded with as few as two and three men could work more effectively.

GANG SWEEPING

Ten gang sweeping crews are assigned to clean areas not serviced by blockmen. A summary of the activities of all gangs is shown in Table 1. Although gang sweeping is supplemented, on a staggered basis, by mechanical sweepers, hand sweeping is needed to perform some tasks which could not be done by motorized equipment, such as cutting grass and weeds along curbs, removing debris from between parked vehicles, and sweeping public stairs and other areas not accessible to motor sweepers.

MOTOR SWEEPING

The eleven motor sweepers in service in the Bureau are assigned to clean those areas which do not have congested parking along the curb. Approximately two-thirds of the city is served by mechanical sweepers; the remaining third is served by blockmen and other cleaning methods.

The Bureau was fortunate in receiving funds to replace two worn-out machines with two modern 3-yard capacity motor sweepers. A photo of one of the new sweepers may be seen on page 172. One has only to observe a motor sweeper working to realize its advantage over hand sweeping methods. But due to parking conditions in certain areas it is impossible to avail ourselves of this modern cleaning method on every street. Motor sweeping records for the year are shown in Table 2.

MOTOR FLUSHING

A fleet of nine motor flushers is used to aid and supplement the work of the other cleaning methods employed by this Bureau. The Bureau was allowed funds for a replacement unit this year. A photo of this new flusher may be seen on page 172. A record of the motor flushers' activities is shown in Table 3. A new two-way radio was installed in the new motor flusher. The Bureau now has two-way radio equipment in four operating units as well as on all supervisory automobiles. In addition to regular street flushing, the flushers are also used to clean the Broadway tunnel.

LITTER CONTROL

Ten litter control trucks, each manned by 1 chauffeur and 2 lumpers, are used. One special litter patrol unit equipped with two-way radio and operated by a laborer is used for emergency cleaning requiring speed and mobility. The larger litter control trucks are assigned routes which they patrol on a regular schedule picking up deposits of litter and other debris. These units pay special heed to known paper pockets where much litter is collected and contained by the ever-present wind.

COLLECTION

Six trucks are assigned to emptying the cans used by blockmen and those receptacles placed throughout the city for use by pedestrians to deposit hand litter. This Bureau was fortunate during 1957-58 in being allowed funds to purchase a 20-cubic yard load packer. Requests in subsequent budgets will be made to acquire more of these units.

UTILITY CREWS

There are four utility trucks operating from the Bureau; three have one chauffeur and two laborers and the fourth has one chauffeur and one laborer. This last unit is used to collect deposits from motor sweepers left at prearranged locations. The other three units are used to assist in weed removal work and removal of waste from containers in the corporation yard and from the Purchaser's Shop #2, and also cleanup of the produce area daily, in addition to fill in for trucks out of service.

CLEANING OF TUNNELS

The Bureau is responsible for cleaning the tile surfaces of both the Broadway and Stockton Street Tunnels.

The tile surface of the Stockton Street Tunnel was cleaned by hand with brushes three times during 1958-1959. Twice weekly throughout the year the roadway and sidewalks of the Stockton Street tunnel were flushed with clear water.

Cleaning of the tile in the Broadway Tunnel is more of a problem because of the difficulty in reaching the surface above the spring line. During 1958-1959 cleaning of the Tunnel was performed on a schedule calling for 52 cleanings. Twice during the last year the tunnel was completely washed by application of a cleaning compound known as "Exhaust Stain Remover." This compound is allowed to remain on the surface for approximately 2 minutes and then is rinsed off with clear water. Although this cleaning method has so far been found to be most economical, it does leave a residue which builds up and defies removal. Because of the residual buildup of this scum it will be necessary, in the near future, to apply steam to the tunnel surface in order to remove it.

PREVENTIVE STREET CLEANING

Full value and use of a street cleaning program for prevention of illegal littering cannot be made until certain minimum requirements are met. The first of these is the assignment of at least one police officer whose sole duty would be apprehension and citation of violators of the anti-littering ordinances. There are sufficient City and State statutes under which any person caught littering may be prosecuted. An example of what may be accomplished in the war against littering is shown by the record of the one litter control officer employed by Monterey County. Until San Francisco recognizes the fact that littering will become worse instead of better, and takes positive action, no reduction can be expected in the cost of cleaning its city streets. The second of these requirements is a program of controlled parking along our streets. Unfortunately this cannot be started until adequate off-street parking facilities are provided.

TABLE 1

DEPARTMENT OF PUBLIC WORKS
Bureau of Street Cleaning

CITY & COUNTY OF SAN FRANCISCO, CALIFORNIA

Annual Report - Gang Sweeping - Fiscal Year 1958-1959
(Figures shown below are number of times per month routes swept)

Month	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11
1958											
July	*	4.60	4.00	2.20	3.00	2.50	4.00	2.00	2.00	2.00	4.00
August		4.00	3.00	3.80	2.00	2.50	2.25	2.60	2.25	1.75	4.20
September		4.20	4.10	3.60	1.50	1.50	2.00	1.80	1.50	1.75	4.00
October		4.60	2.30	4.00	2.00	2.50	2.25	3.00	2.50	1.50	4.60
November		4.00	3.00	4.00	1.00	1.25	2.25	2.80	1.50	2.25	3.80
December		4.40	3.00	5.00	1.50	3.00	2.75	2.40	2.00	2.00	4.60
1959											
January		4.40	2.50	3.20	1.75	2.25	2.75	3.00	2.00	2.00	4.00
February		3.00	4.00	4.60	1.25	2.75	2.50	3.80	3.25	2.00	3.80
March		4.40	4.00	4.00	1.75	2.25	2.75	4.40	2.00	2.00	4.40
April		4.40	4.00	2.60	1.50	2.75	2.75	2.50	1.75	2.33	4.40
May		4.00	4.00	3.50	1.00	2.00	2.50	2.50	2.75	2.00	4.00
June		3.40	4.00	4.40	1.00	2.50	2.75	2.80	2.00	2.50	4.00
Total		49.40	41.90	44.90	19.25	27.75	31.50	33.60	25.50	24.08	49.80

NOTE: Each gang is under supervision of a Labor Sub-Foreman and is composed of 4 to 6 hand-sweepers with a truck crew of 1 chauffeur and 2 laborers. Length of each route varies from 66 to 270 curb miles.

TABLE 2

DEPARTMENT OF PUBLIC WORKS
Bureau of Street Cleaning

CITY & COUNTY OF SAN FRANCISCO, CALIFORNIA

Annual Report - Motor Sweeping - Fiscal Year 1958-1959

DISPOSITION OF 11 SWEEPERS (Hours)

Month	Curb Miles Swept	Sweeper Loads (Number)	Sweeping	Downtime*	Total Work-Day Hours	Downtime* (Percentage)	Average Number of Sweepers in Operation
1958							
July	4,002	344.0	1192.50	743.5	1,936	38.00	6.82
August	4,021	463.5	1362.50	485.5	1,848	26.00	8.14
September	3,380	302.5	1160.00	600.0	1,760	34.00	7.26
October	3,759	370.0	1096.50	927.5	2,024	45.00	6.05
November	3,494	296.0	1102.00	570.0	1,672	34.00	7.26
December	3,196	295.0	1524.00	412.0	1,936	21.00	8.69
1959							
January	3,659	323.0	1336.50	423.5	1,760	24.00	8.36
February	3,204	240.0	1093.00	667.0	1,760	37.00	6.93
March	4,051	303.0	1312.50	711.5	2,024	35.00	7.15
April	3,847	263.0	1386.50	461.5	1,848	25.00	8.25
May	3,813	275.0	1431.00	417.0	1,848	23.00	8.47
June	4,375	272.0	1478.00	458.0	1,936	24.00	8.36
Total	44,801	3,747	15475.00	6,877	22,352		
Averages Per Month	3,734	312.0	1589.50	573.0	1,861	31.00	7.65

NOTE: *Downtime includes all work-day time that equipment is not engaged in actual street-sweeping; such as when undergoing repairs, held for servicing or for standby.

TABLE 3

DEPARTMENT OF PUBLIC WORKS
Bureau of Street Cleaning

CITY & COUNTY OF SAN FRANCISCO, CALIFORNIA

Annual Report - Motor Flushing - Fiscal Year 1958-1959

DISPOSITION OF 9 FLUSHERS (Hours)

Month	Curb Miles Flushed	No. of Stops for Refinning Water Tanks	Flushing	Downtime*	Total Work-Day Hours	Downtime* (Percentage)	Average Number of Flushers in Operation
1958							
July	5,464	3,474	1,168	251	1,419	17.00	7.47
August	4,346	2,617	934	438	1,372	31.90	6.13
September	4,435	2,575	935	377	1,312	28.90	6.40
October	5,781	3,463	1,221	451	1,672	26.90	6.58
November	4,819	2,872	1,043	41	1,084	.38	8.62
December	5,455	3,194	1,195	221	1,416	15.45	7.61
1959							
January	5,305	3,050	1,139	257	1,396	18.40	7.35
February	5,310	3,040	1,138	117	1,255	9.30	8.16
March	5,961	3,582	1,301	135	1,436	9.40	8.16
April	6,107	3,772	1,281	131	1,412	9.20	8.16
May	5,760	3,471	1,210	158	1,368	9.20	8.16
June	5,534	3,263	1,168	90	1,258	7.00	8.37
Total	64,277	38,373	13,733	2,667	16,400	183.03	91.17
Averages Per Month	5,356	3,197	1,144	222	1,366	15.25	7.59

NOTE: Each flusher is operated with 1 Chauffeur and 1 Laborer for handling flushing controls.
*Downtime includes all work-day time that equipment is not engaged in street flushing; such as when undergoing repairs, held for servicing, or standby or when operating on work of different nature.

Cooperation of neighborhood groups, educators, newspapers and other communications media have been good. Articles have been written by newspapers, publicitity has been afforded offenders convicted of law breaking, and school officials have helped in educating the youth concerning littering. None of these without the aid of adequate enforcement is going to stop the selfish spoilage of our city streets and parks.

LANDSCAPE MAINTENANCE

The maintenance of a total of about 68 acres of landscaped areas, located within or bordering on public streets throughout the city, is the responsibility of the Street Tree Division of this Bureau. This maintained area includes about 6,000 trees and various species of shrubbery and ground cover.

In addition to the maintenance of established plantings, this Division promotes public participation in planting and maintaining suitable plants within street sidewalk areas, prepares and forwards permits to property owners for such planting and maintenance at the owners' expense; experiments with various species of trees to determine the most suitable type for the varied climatic zones of this city; consults with the Bureau of Engineering on projected landscaped areas and is represented on the Street Tree Advisory Committee for the Department.

The planting of new landscaped areas, except under State control, is performed by public contract under specifications and plans prepared by the Bureau of Engineering. Maintenance of new plantings, including specific freeway areas planted by the state, is assigned to this Division.

During the year, two new landscaped areas located at Upper Market Street and at James Lick Freeway interchange from Third Street, totaling about 70,000 square feet, were assigned to the Division for maintenance. Within the next year it is expected that new landscaped areas on Portola Drive, Geary Boulevard, Upper Market Street and Christmas Tree Point will also be added to the Division's maintenance program.

The Street Tree Advisory Committee to the Department of Public Works continued to give freely of their time, thought and helpful guidance towards advancing the street tree program for this City. The Committee meets monthly and is presently composed of Chairman William Siden, Landscape Consultant for the Pacific Gas and Electric Company; Keith Davey, President of the Davey Tree

Surgery Co.,; Sylvester Evans, Landscape Engineer for the California State Division of Highways; Roy Hudson, Supervisor of Maintenance in Golden Gate Park; Harry Nelson, Instructor of Horticulture at San Francisco City College; Jack Spring, Chief Nurseryman for Golden Gate Park, and Mrs. Morley Thompson, President of San Francisco Garden Clubs. The Supervisor of the Division, Brian Fewer is assigned by the Bureau as Recording Secretary.

In consultation with the Committee, the Division prepared a booklet of information on desirable street trees for this city which has been printed by the San Francisco Chamber of Commerce and is available to the public at a nominal cost.

SUMMARY OF PLANTING & MAINTENANCE
1958 - 1959

	Trees Planted	Trees Removed	Trees Pruned	Shrubs Planted
Work Performed Privately under permit from the Bureau	262	92	64	-
By Tree Division Forces	300	85	4,900	2,493
By Public Contract	85	150		
TOTAL	647	327	4,964	2,493

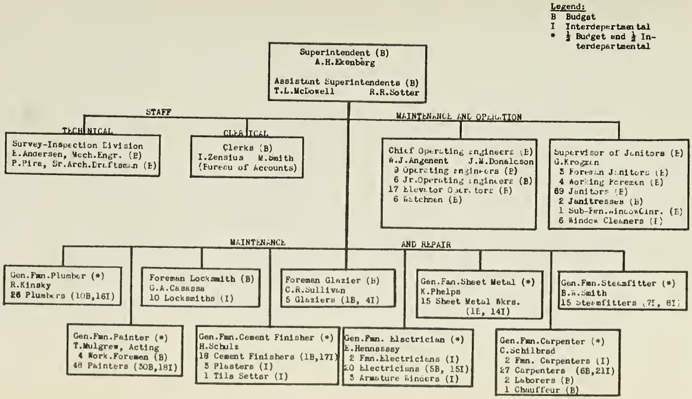
MOTOR SWEEPER—THREE YARD CAPACITY

MOTOR FLUSHER

BUREAU OF BUILDING REPAIR
DEPARTMENT OF PUBLIC WORKS

ORGANIZATION CHART

1958-59



BUREAU OF BUILDING REPAIR

A. H. Ekenberg, Superintendent

This Bureau is, as the name implies, that division of the Department of Public Works Maintenance and Operation activities which deals primarily with our public buildings. The scope of Bureau responsibilities is wide and varied, but of primary importance is the providing of services and materials for the maintenance, repair, replacement and reconstruction of the 316 City and County buildings which have been established by Charter authority or other policy determinations as being the responsibility of the Department of Public Works. While the above is the primary function, the following are the secondary Bureau activities, in relative order of importance and/or dollar value:

1. Provide operation and custodial personnel and supplies for 31 of the above buildings, requiring the full time services of 119 employees.

2. Provide necessary maintenance and repair services to other City departments through an interdepartmental work order procedure, or by competitive public contract. Relative importance and proportions of this phase of Bureau activities is illustrated graphically in Figure 1. The major portion of this work will be noted as being derived from the Board of Education, with other City departments accounting for lesser amounts.

3. Budget for and provide labor, materials, supplies and contractual services for street traffic painting. The units of work performed and the unit costs thereof are shown on Table 2.

4. Provide inspection and survey services necessary for the development of a preventive maintenance program, and the compilation of data and material for the intelligent preparation of budgets. In addition, providing technical consultation and assistance to the operating activities in the appropriate maintenance and repair of properties.

5. Maintenance and repair of street name signs.

6. Repair of street structures and sidewalks fronting on City property, and of various monuments in street areas.

ORGANIZATION AND PERSONNEL

The organization chart included as a part of this report indicates the primary divisions within the Bureau, and their function as regards maintenance and repair, and maintenance and operation, in addition to the technical and engineering division providing survey and inspection services. Division, shop, or craft heads are shown therein as of June 30, 1959. In addition, the chart indicates the budgeted as contrasted with the interdepartmental positions.

Personnel of the administrative, technical and operational divisions consists entirely of budgeted employees, as does the clerical staff assigned to this Bureau from the Bureau of accounts.

In the maintenance and repair or shop divisions, however, the majority of employments are enumerated as interdepartmental, and are not established as continuing positions, but only "as needed" when the services are required and the funds are provided. The major portions of these interdepartmental employments have been derived from school funds during preceding years. Of the budgeted shop employees, most are on assignment to various public buildings, as shown in detail in the report for 1957-58. Such assignments, however, are not inflexible, and are subject to call as necessary when the need is urgent elsewhere.

FACILITIES

As was noted in the previous report, the Bureau's gradually increased work load and added responsibilities has made urgent the necessity for expanded quarters, so as to not impose undue handicaps on efficient operation. Failure of the bond issue for Yard expansion in November 1958 was a severe impediment to the continued progress of this as well as the other Bureaus contained therein.

VEHICLES AND PORTABLE EQUIPMENT

The Bureau's continuing program of replacing rented trucks to the greatest extent possible, and of gradually eliminating over-age equipment, has resulted in gains for the year. As of June 30, 1958, City-owned vehicles operated by the Bureau totalled 59, while but 5 rented trucks were still in use. Of the City vehicles, 13 are passenger cars, the majority of the remainder being 1/2 of 3/4 ton pickups or panel trucks.

An analysis of maintenance and repair costs on the nine coupes and sedans which were traded in by the Department of Public Works during 1958-59 is of interest, and the following are the actual figures on the maintenance and repair during the lives of these vehicles:

Total miles driven (9 vehicles)	590,877
Total cost of repairs (including accidents)	$11,461.60
Average cost per mile (repairs, etc.)	.0196
Average life at turn-in	10.3 years

It has been observed by the Department that operating costs increase sharply after the fifth year of operation, and it is believed that major economies can be effectuated by not unnecessarily extending vehicle use beyond such a period. This contrasts markedly with rental costs of light sedans, as obtained by the Purchaser of Supplies, during the year 1958-59.

Monthly rental costs	$109.00

Plus gas and oil costs at .0166 per mile.
Estimated use per vehicle is 600 miles per month.

PROGRESS AND PROBLEMS

In common with other divisions of either public functions or private enterprise, this Bureau has not been without its problems during the preceding year, but has nonetheless succeeded in some degree in achieving significant, if not substantial, gains.

A major problem during the past year was the sudden diminution of the interdepartmental work load customarily derived from the School Department, the extent of the variation from preceding years being shown by Figure 1. In addition to the sudden and unanticipated cutback, the work load was extremely spasmodic and unpredictable from month to month during the year. This slash was caused by the abandonment of the previous policy procedures for maintenance and repair work in the schools by the existing Board of Education, with apparently no firm policy for such procedures having yet been re-established by June 30, 1959. The prospects at that time for any change beneficial to the Bureau were apparently dim, or, at best, vague.

The loss of this work load was compensated for in two ways, first by the necessary reduction in interdepartmental employments, and secondly, by aggressively and successfully competing for contractual work for other City departments.

This latter course has been of great significance in improving Bureau work practices, and in indicating that our operations are in line with those of private industry. The policy of the Bureau bidding on such contracts was recommended by the Griffenhagen Report of

1952, and the results of the past year point up the many merits of the suggestion.

In addition, through the issuance of a supplement to the general regulations of the Bureau, other pertinent recommendations of the Griffenhagen Report have been placed in effect. This includes the keeping, by craftsmen assigned generally to specific buildings, of a log book of their daily activities and work programs. It has also included the designation and recognition of one person in each building or group of buildings as the coordinator and supervisor of building activities in general, and as being in charge of work assignments for all crafts. In buildings under the jurisdiction of this Bureau this has been delegated to the chief operating engineer, as it has been for most other civic departments for which we perform services, and as is common practice in other agencies of government or in private industry.

Improvement in janitorial procedures has also been emphasized during the past 12 months. Unfortunately, the major attempt to improve current cleaning practices by mechanization and new equipment was necessarily cancelled when budget cuts deleted the requested funds. Experiments are still under way by the Supervisor of Janitors to ascertain which are the most effective mechanical scrubbers and in the application of new and improved work methods. An analysis of cleaning requirements was made by the application of the Gilbert formula (used by the Building Owners and Managers Association) to the building at 150 Otis Street and adjustments made accordingly. Study is currently underway to apply the Gilbert formula to the janitorial requirements of the new Hall of Justice, which will contain 470,000 square feet of cleaning work load as contrasted with approximately 100,000 square feet of such work load at the present Hall of Justice.

Experimental trials have also been made as to the possibility of absorbing additional window cleaning functions by our present staff, without personnel additions. This was found practical, if transportation difficulties can be overcome. A modest but successful marble poulticing program is also under way, and is expected to greatly improve the appearance of considerable areas of marble, particularly in public rest rooms.

With the cooperation and much appreciated assistance of the Bureau of Street Cleaning, their large trucks were made available as required for a major housecleaning of the City Hall. The accumulations and cast-off material of many years, of several departments, resulted in 7 truckloads of debris being hauled to the dumps, which has greatly improved appearances as well as morale.

UNIT COSTS

One of the primary objectives of the Bureau for several years has been the establishment and determination of unit costs relating to the maintenance and repair of public buildings. Due to the intricacies of the varying degrees in which responsibility for these duties rests among the various departments of the City, such an evaluation is not easily determined. For buildings operated by members of the Building Owners and Managers' Association, such costs are readily established, and an excellent accounting breakdown is available. However, except in few instances, many of the elements of cost used to establish such data for our buildings are not available. An attempt to equate building maintenance costs with those of other cities is likewise difficult to accomplish, as terminologies and practices vary greatly from place to place.

Meanwhile, through the successive annual reports of available cost data and the appraisal of current budget requests, it is expected that ultimately these costs can be determined with considerable accuracy. Such figures would thus be available for the logical determination of maintenance and repair requirements and the more objective preparation of budget requests for such purposes.

While unit costs can be established in various ways, it is believed that the most uniform and the most readily determined is that expressed in cost per square foot, as is done by the largest proportion of private industry and also by other civic agencies. Table 1 gives unit costs per square foot as expended during 1958-59 for the various public buildings for which we are responsible.

As one of the major components of our maintenance and repair costs consists of personal services, budgeted for as wages and salaries, any increase in this amount is, of course, reflected directly in total building maintenance cost. While materials compose not only a smaller percentage of such total costs, it is extremely difficult to integrate material prices and the quantities used so as to arrive at the precise degree to which they affect total operations.

This, however, is possible with wages and salaries, which can be figured with considerable accuracy. For the fiscal year 1958-59, weighting salaries and wages by also considering the relative numbers of each employment group, it has been found that in comparison with the previous year, wages averaged 5.50% higher, salaries 4.26% higher, and the combined average of both was 4.86% higher.

Such increases are, of course, similar to and largely parallel with those experienced throughout industry and government during recent years. However, unless appropriated funds are at least equal such increases there must be a corresponding diminution of services, which, in the case of building maintenance, is an extremely critical item with which to temporize.

SHOP HIGHLIGHTS

As mentioned in last year's report, it is intended that each annual report will give special emphasis or notice to a particular craft shop, until all have been covered.

GLASS SHOP

The glazing division of our Yard operations is comprised of five journeyman glaziers and one foreman glazier, the only shop other than the lock shop which is not headed by a general foreman. While caring for all glazing and the related requirements of all public buildings for which we are responsible, the major portion of the shop's work is interdepartmental, by a ratio of over 2 to 1.

Of particular importance is the volume of school department work, which consists in large part of emergency requisitions requiring immediate action and replacement. While these requisitions average 150 per month, they are substantially increased during vacation periods, and can also be correlated with Daylight Saving Time. A sad commentary is that the major portion of this is occasioned by vandalism, and in several instances major replacements have been effected only to have them immediately destroyed.

The Recreation and Park Department, with its expanded building program, also contributes largely to these emergency requirements because of vandalism, but in addition the nature of the recreational activities and the limited play areas are also partially responsible. Besides the above, the present radical change in architectural treatment of all building construction is another major factor, as the use of curtain walls of glass and increasing fenestration continues. This condition, while aesthetically most desirable, has greatly increased the work load of the glaziers.

For the last fiscal year, shop expenditures for glass were $14,857.26, with approximately $800 more for putty, glazier's points, and other miscellaneous supplies.

Approximate monthly glass requirements were as follows:

Rough Wire Glass	750 to 1000 sq.ft.
Wire Plate Glass	250 to 400 sq.ft.
Obscure Glass	100 to 200 sq.ft.
Window Glass	1000 to 1500 sq.ft.

Of particular note is the fact that substantial savings are made annually through the use of salvaged glass. This is saved by cutting smaller stock sizes from all broken pieces whenever possible, and is based on the actual costs if purchased, of the type of glass salvaged. For the past year this has amounted to $1992.27, or an average of $166.02 per month.

TABLE 1

PUBLIC BUILDINGS UNDER THE JURISDICTION OF THE DEPARTMENT OF PUBLIC WORKS FOR MAINTENANCE AND REPAIR

	Buildings		1958-59	
Department and Activity	No.	Floor Areas- Total Sq. Ft.	Total Budgeted Funds (Inter-departmental & General Repair	Unit Costs Based on Floor Areas - $/Sq. Ft.
Fire Department	55	590,000	$168,252	$0.285
Police Department (C)	13	118,807	54,058	0.454
Public Health				
Health Center Bldg.(C)	(4	103,370	27,830	0.222
and Health Ctrs.	(7 (R)	22,151		
Adult Guidance Center	-	(4,500)	700	0.155
V.D.Control	1(R)	6,200	3,567	0.576
Emergency Hospitals	6	33,352	11,364	0.341
Hassler Health Home	17	130,000	54,278	0.417
Laguna Honda Home	25	650,000	513,297*	0.790*
San Francisco Hospital	33	753,000	573,501*	0.762*
Public Library	(19	314,540	64,120	0.196
	(8(R)	13,280		
Public Welfare				
585 Bush Street	1	43,791	7,728	0.177
150 Otis Street	-	(17,900)	2,000	0.112
Redwood City (S.M.R.C.)	1	10,000	2,109	0.211
Public Works				
City Hall (C)	2	526,540	145,224	0.276
Hall of Justice (C)	2	162,523	44,237	0.272
150 Otis Street (c)	2	40,900	10,447	0.255
Maintenance Yard (C)	9	72,040	8,686	0.121
Sewage Pumping Stations	14	23,085	7,752	0.336
Sewage Treatment Plants	36	543,330	80,884	0.149
Real Estate Department				
Civic Auditorium-Brooks Hall	2	434,500	28,590	0.068

	Buildings		1958-59	
Department and Activity	No.	Floor Areas-Total Sq. Ft.	Total Budgeted Funds (Inter-departmental & General Repair	Unit Costs Based on Floor Areas-$/Sq. Ft.
Sheriff				
County Jails #2 and #4	7	138,970	38,940	0.280
Juvenile Court				
Youth Guidance Center	16	200,828	55,380	0.276
Log Cabin Ranch	16	32,000	12,610	0.394
Miscellaneous Depts.	16	166,629		
and Activities	4(R)	73,197	18,420	0.077
	-	(20,700)		
TOTALS	316	5,203,033	$1,933,974	$0.371 (ave.)

NOTES:

(R) Indicates building is rented. (Total of 20 rented buildings with a combined floor area of 114,828 square feet.)

(C) Indicates custodial and/or operational services also provided by Bureau of Building Repair.

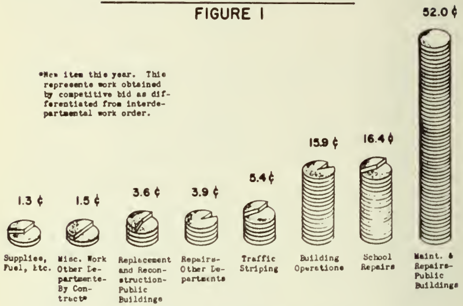
(00,000)
These floor areas are not added to obtain the total floor areas of all buildings as these areas are included elsewhere with other buildings.

* Figures disproportionately large because of current deferred maintenance program which represents work not done in prior years.

($133,596 allowed for Replacement & Reconstruction of Public Buildings are not included in any of the above sums.)

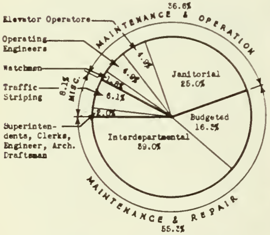
BUREAU OF BUILDING REPAIR

FIGURE I

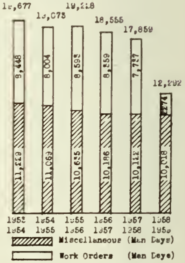


*New item this year. This represents work obtained by competitive bid as differentiated from interdepartmental work order.

HOW THE DOLLAR IS SPENT



ASSIGNMENT OF PERSONNEL



SCHOOL REPAIRS

STREET TRAFFIC PAINTING

TABLE 2

Classification	Unit	Amounts	Unit Cost	Total Cost
Traffic Line Striping	Lin.Mile	535.01	$ 83.06	$ 44,436.42
Traffic Line Spotting	Lin.Mile	47.45	103.35	4,903.89
Intersections-General				
(a) Crosswalks (including words)	Lin.Ft.	304,437	.1350	41,085.33
(b) Guidelines (including words)	Lin.Ft.	179,537	.0695	12,486.57
School Crosswalks (including words)	Lin.Ft.	203,433	.1527	31,074.09
Bus Zones (including words)	Lin.Ft.	143,348	.0942	13,499.26
Parking Stalls				
(a) Diagonal	Number of Stalls	1,933	1.1805	2,281.99
(b) 4-foot cross	Number of Stalls	4,137	.7437	3,076.71
Railroad crossings	Lin.Ft.	2,252	.0884	199.04
Curb Painting				
(a) General	Lin.Ft.	461,129	.1008	46,459.02
(b) Taxi	Lin.Ft.	5,552	.1131	627.91
TOTAL COST				$200,130.23

The cost shown is the direct cost including working foreman, labor, materials, supplies and contractual service corresponding to the Bureau work program and budgeted funds.

BUREAU OF ACCOUNTS

J. J. McCloskey, Chief Clerk

The Bureau of Accounts continued to perform its principal accounting and bookkeeeping activities, consisting of the operation and control of the budgetary and financial transactions for all bureaus of the Department, at about the same level of performance as that of the previous fiscal year.

During the past year, the continuing development of I.B.M. machine accounting was accelerated by the addition of the processing of all budget financial transactions for the maintenance and operation bureaus located at 2323 Army Street. Now, through I.B.M., statements are prepared monthly and forwarded to the bureau superintendents, showing in detail the allowances and expenditures for each object of expenditure budgeted for the individual bureau.

The I.B.M. machine accounting system, initiated in the Bureau of Accounts on July 1, 1957, is now performing the following functions:

For the Division of Traffic Engineering, the system furnishes statistics on curb painting, pavement painting and traffic accidents, and maintains an inventory of all traffic and parking signs located throughout the city.

For the Bureaus of Building Repair, Architecture and Engineering, the system provides for a daily recording of costs for all jobs performed under work orders, showing labor, indirect costs and material charges. It also issues frequent statements regarding the financial status of individual jobs and their appropriations.

For the Bureaus of Building Repair, Street Cleaning, Sewer Repair and Sewage Treatment, Street Repair (including Bridges and Tunnels), and the Street Tree Planting Division, the system records all transactions affecting budget allowances and expenditures. It also furnishes monthly statements regarding these transactions, and statements covering vehicle mileage, repairs, and gasoline usage. In addition, it maintains a perpetual inventory of materials and supplies in stores accounts.

PERSONNEL

As of June 30, 1959, the permanent staff of 36 employees included:

1 - Chief Clerk
5 - Accountants I
2 - Accountants II
1 - Accountant III
11 - General Clerks
1 - Senior Clerk
2 - Head Clerks
2 - Key Punch Operators I.B.M.
2 - Tabulating Machine Operators I.B.M.
1 - Supervisor, Tabulating Division
4 - General Clerk-Stenographers
4 - General Clerk-Typists

In addition to the above employees, a Storekeeper is assigned by the Purchaser of Supplies to perform duties in connection with the operation of the sub-storeroom and materials yard.

Budget expenditures for operation of the Bureau of Accounts for the fiscal year 1958-59 were as follows:

Permanent Salaries	$150,888.00
Contractual Services	17,706.00
Materials & Supplies	5,101.00
Services of other Departments	4,893.00
Equipment	746.00
TOTAL	$179,334.00

FUNCTIONS AND ORGANIZATION

The operating functions of the Bureau embrace control of payroll procedure, personnel records and field time-keeping; purchase order requisitions; sub-storeroom and inventories; automotive expenditures and gasoline and tire records; work order job costs and invoicing; side sewer job and refunds accounts; State gas tax subventions and Bond Funds accounts; the cash revolving fund for the Department; the stores revolving fund; budget preparation and controlling accounts; Radio Control Station; and the supplying of clerical service to all of the operating bureaus.

OPERATIONS

Job costs pertaining to damages to City property under the jurisdiction of the Department are compiled and forwarded to responsible parties for collection. These costs amounted to $8,771.20 for the fiscal year and embraced 229 cases, covering damages to bridges, automotive equipment, street structures, traffic signals, street signs, street trees, traffic devices and prisoner damage to police stations. The Bureau handled the fiscal processing of contracts under bond issues for Street Improvements, Sewers, Sewage Treatment Plants, Schools, Hospitals, and Fire Houses under programs which are expected to continue into subsequent years.

In the supplying of materials for the varied activities of the Department, a sub-storeroom and a material yard are conducted, through which 25,622 transactions were handled involving the delivery of 94,446 items to jobs. Outside purchases from vendors brought about the issuance of 5,045 requisitions involving 25,225 items and 6,074 delivery orders involving 24,296 items and 14,385 storeroom tags involving the delivery of 43,155 items and 118 requisitions on storekeeper involving 1,770 items.

The Stores Revolving Fund under the control of the Bureau is designed to permit the purchase in advance of constantly used materials. Plumbing supplies, electrical items, paints, hardware, lumber glass, tools, sewer pipe, brick, cement, castings and miscellaneous needs which can be foreseen, are carried in Stores and charged out to the various jobs as needed. Controls have been established which facilitate monthly reimbursements for goods withdrawn, and stores records are maintained on a perpetual inventory basis subject to annual physical check.

The Department Cash Revolving Fund of $1,500.00 is used by the Bureau for payment of small bills and transportation charges, and enables workmen on field work to make cash purchases at neighborhood stores, thus avoiding trips to downtown establishments. During the fiscal year, 65 monthly Revolving Fund vouchers were prepared, requiring the issuance of 2,028 warrants for a total of $22,291.48. All transactions are conducted under controls set up by Ordinance of the Board of Supervisors.

BUREAU OF ACCOUNTS

Interdepartmental Service Under Work Order Procedure For:

Schools	$1,079,377.44
Recreation - Park	7,923.32
Maintenance and Repair	744,436.97
Replacement and Reconstruction	49,409.68
Capital Improvements	723,795.26
Special Gas Tax	465,306.11
State Highways	4,460.44
Miscellaneous	13,931.67
1947 Street Improvement Bonds	339,564.27
1947 Recreation Bonds	124.85
1948 School Bonds	100,074.42
1956 School Bonds	183,458.69
1952 Firehouse Bonds	10,503.27
1944 Sewer Bonds	382,871.00
1954 Sewer Bonds	281,751.67
1944 Sewage Treatment Bonds	255,000.00
1954 Laguna Honda Home Bonds	29,883.87
1954 San Francisco Hospital Bonds	792,622.00
1954 Exhibit Hall Bonds	1,712.67
1955 Playground and Recreation Center Bonds	2,626.52
1958 Park - Recreation Bonds	10,166.59
1956 Hall of Justice Bonds	40,457.93
1956 Airport Bonds	1,737.62
Federal Airport Project Bonds	1,054.12
War Memorial	32,184.62
Art Museum	3,262.24
De Young Museum	43,114.62
Legion of Honor	186,506.56
Engineering	7,057.64
Parking Authority of San Francisco	10,819.62
Public Utilities	24,279.37
Publicity and Advertising	3,671.74
Special Road Improvement	1,127,039.69
Street Cleaning - State Highways	43,123.50
State Highways - Repairs	11,946.25
TOTAL INTERDEPARTMENTAL SERVICE	$7,015,256.23

SUMMARY OF TRANSACTIONS

Budgeted Funds, Subject to Control and Appropriated to:

BUREAU	BUDGET 1957-58	BUDGET 1958-59	EXPENDITURE 1957-58	EXPENDITURE 1958-59	
GENERAL FUND					
General Office	174,411	173,273	173,318	177,649	#
General Office - Improvements	1,487,325	1,130,768	885,139	628,837	+
Architecture	449,615	533,551	448,832	497,255	
Building Inspection	425,414	586,921	421,589	579,223	
Engineering	472,206	502,822	471,992	499,778	
Central Permit	50,128	50,906	49,776	50,790	
Accounts	171,286	186,017	168,699	179,334	
Building Repair	2,450,167	2,994,698	2,360,297	3,254,175	**
Traffic Striping	219,806	203,020	188,958	200,123	
Street Cleaning	2,087,578	2,184,803	2,075,514	2,178,875	
Sewer Repair	930,980	965,814	941,471	974,453	
Sewage Treatment Plants	1,027,161	1,058,020	998,578	1,027,807	
Sewage Pumping Stations	108,183	111,338	107,071	109,196	
SPECIAL ROAD IMPROVEMENT FUND					
Street Repair	1,523,416	1,649,241	1,494,314	1,626,143	
Bridges and Tunnels	170,989	173,704	167,004	168,545	
Street Tree Planting	143,751	142,602	137,881	135,122	
Traffic Engineering	448,425	454,889	428,823	445,999	
Traffic Signal Maintenance	291,675	292,586	280,417	289,151	
Engineering Administrative	93,140	99,265	87,211	94,373	
Maintenance & Reconstruction	69,644	59,000	67,872	58,229	
Construction	2,513,063	1,347,101	1,212,734	1,530,695	*
SPECIAL GAS TAX STREET IMPROVEMENT					
Maintenance	364,527	359,150	326,498	337,495	
Construction	3,190,000	778,150	627,821	3,704,221	=
TOTALS	18,862,890	16,037,639	14,121,809	18,747,468	

Includes $32,161 for telephone and telegraph expense of which $7,161 is to be provided.

+ Expenditures of $463,686 from funds budgeted in prior years.

* Expenditures of $1,109,179 from funds budgeted in prior years.

= Expenditures of $3,678,371 from funds budgeted in prior years.

** Expenditures of $406,257 from funds budgeted in prior years.

CENTRAL PERMIT BUREAU

Sidney Franklin, Supervisor

FUNCTIONS

The principal function of the Central Permit Bureau is the issuance of all permits under the jurisdiction of the Department of Public Works, and the collection of the fees required therefor. This includes permits for the erection, alteration, demolition and moving of buildings (as well as the subsidiary permits in connection therewith), permits for all types of billboards and signs, and permits involving the use or excavations of streets and sidewalks. All plumbing, gas appliance and electrical permits are now also issued in this bureau.

It is the duty of the staff of the Central Permit Bureau to receive applications for these various types of permits, route them for processing, issue the permits when the applications are properly approved, and collect the necessary fees.

The Central Permit is the custodian of all public records relevant to permits issued by the Department of Public Works, and of all plans and specifications in conjunction with these permits. These records date back to the 1906 Earthquake and are assuming more importance each year in determining the status of buildings affected by our slum clearance program. Approximately 15% of the time of our personnel is now devoted to giving information obtained from our current and old records.

Another service performed in this bureau is the assignment of street addresses to all new buildings and the elimination of possible confusion resulting from improper existing numbers. Our official house number records are constantly referred to by realtors, title insurance companies, etc., when the correct street numbers for buildings must be obtained.

It is also the duty of the Central Permit Bureau to render bills for all claims for damages to property under the jurisdiction of the Department of Public Works, and for costs in excess of deposits in the installation of side sewers. The moneys collected from these bills, as well as all other receipts of the department, are cleared through this bureau for deposit in the proper funds in the City Treasury.

The fiscal year 1958-1959 was a very busy year in this bureau. This was due not only to the fact that, for the first time, the issuance of plumbing permits became a function of the bureau, but also must be attributed in a large part to the building boom that was experienced in San Francisco during this fiscal year. The number of permits issued in the bureau increased from 52,391 in the fiscal year 1957-1958 to 82,196 in the fiscal year 1958-1959. This is an increase of approximately 60% and was accomplished with no increase in our staff force. It could not have been done without the complete cooperation and untiring efforts of all our employees.

PERSONNEL

The personnel of the Central Permit Bureau, as of June 30th, 1959, was as follows:

1 Supervisor

1 Cashier

2 Senior Clerks

1 General Clerk-Stenographer

5 General Clerk-Typists

THE FOLLOWING TABLES ILLUSTRATE THE SCOPE OF THE ACTIVITIES OF THE CENTRAL PERMIT BUREAU

TABLE I

PERMITS ISSUED AND FEES RECEIVED

	1958-1959		1957-1958	
	Permits	Fees	Permits	Fees
Buildings	$ 11,404	$ 260,777	$ 11,042	$ 224,454
Billboards	164	568	165	603
Demolitions	431	2,470	313	3,075
Boiler Installations	54	337	79	536
Boiler Inspections	537	4,151	888	5,323
Street Space *	1,369	49,629	810	43,504
House Numbers	925	3,590	812	3,114
House Moving	146	2,620	99	1,980
Excavations (Public Utilities, etc.)	10,340	29,028	10,426	22,085
Excavations (Exclusive of Utilities)*	796	3,880	727	3,881
Flue Registrations	59	1,160	52	1,040
Flues - New Buildings	28	70	22	73
Flues - Old Buildings	64	196	73	256
Flues - New Buildings, Coupons **	2,950	1,475	104	1,300
Flues - Old Buildings, Coupons **	300	600	22	440
Posting Notices	834	2,261	729	1,973
Flower Markets	39	1,260	39	1,248
Advertising	15	2,506	10	1,536
Surveys	37	23,160	23	11,730
Engineering Inspections	74	33,418	51	17,405
Electrical Inspections	17,168	110,749	16,033	95,106
Sign Inspections	Included in Elec. Insp.	6,979	Included in Elec. Insp.	6,916
Electrical Sales	2,319	22,927	2,304	23,219
Plan Checking	6,463	65,228	5,231	47,611
Architect's Investigation	132	1,845	87	1,335
Garage Door Coupons **	800	2,400	38	2,850
Hearings for Substitute Materials	10	1,220	7	490
Plumbing Inspections***	22,064	57,852	-	-
Gas Appliance Inspections***	Included in Plbg. Insp.	13,650	-	-
Journeyman Plumber's License***	"	192	-	-
Gas Appliance Dealers***	"	120	-	-
TOTAL - TABLE I	79,522	706,318	50,192	523,083
TOTAL - TABLES II & III	2,674	5,460,101	2,199	4,607,685
GRAND TOTAL - PERMITS & REVENUE	82,196	6,166,419	52,391	5,130,768

* Permits and fees only. See Table II for refundable deposits.

** Formerly computed as number of books sold.
Now comprises number of individual permits issued.

**** Formerly under jurisdiction of Dept. of Public Health.
Transferred to Dept. of Public Works, July 1, 1958

TABLE II

MISCELLANEOUS DEPOSITS

	1958-1959		1957-1958	
REFUNDABLE DEPOSITS	Permits	Deposits	Permits	Deposits
Street Space	*	$ 18,750	*	$ 20,620
Subsidewalks	1	1,720	1	6,430
Deposit on Plans	1,715	145,957	1,446	93,133
Excavations	*	946	*	1,249
TOTAL	1,716	$167,373	1,447	$121,432

* Street Space and Excavations require both a fee and a deposit. Amounts shown are deposits only.

PARTIALLY REFUNDABLE DEPOSITS				
Side Sewers	665	$257,875	596	$223,950
Excess Costs - Side Sewers	69	4,924	35	2,181
TOTAL RECEIVED	734	262,799	631	226,131
AMOUNT REFUNDED		92,488		88,444
Net Revenue applied or to be applied to Installation Costs				
AGENCY DEPOSITS				
Street Improvement Bonds	224	10,448	121	10,111
TOTAL	2,674	440,620	2,199	$357,674

TABLE III
MISCELLANEOUS REVENUE

	1958-1959 Revenue	1957-1958 Revenue
General Fund	$ 51,974	$ 62,041
Special Road Improvement Fund	2,878,920	2,820,721
State Highway Trust Fund	20,766	24,732
1948 School Bond Fund	--	1,302
Special Gas Tax—Street Improvement Fund	2,060,578	1,340,419
San Francisco Unified School District Fund		
1933 Sewer Bond Fund	--	1,396
San Francisco Water Operating Fund	6,597	--
1947 Street Improvement Bond Fund	625	--
TOTAL	$5,019,481	$4,250,611

TABLE IV
STATEMENT OF CONDITION
SPECIAL FUNDS AS OF JUNE 30, 1959

	Balance June 30, 1958	Deposits 1958-1959	Refunds 1958-1959	Balance June 30, 1959
Special Permit Fund (St. Space and Subsidewalk Dep.)	$19,850.00	$20,470.00	$15,360.00	$24,960.00
Street Improvement Fund (Payments of Street Improv. Bonds)	465.27	-	-	465.27
Excavation Fund	2,084.30	945.70	716.80	2,313.20
Deposits on Plans	$10,333.00	$145,957.00	$144,317.00	$11,973.00

APPENDIX I

BUREAU OF ENGINEERING CURRENT CONTRACT DATA SUMMARY
Showing All Contract Work Awarded or Under Way
July 1, 1958 - June 30, 1959

Table	Type of Construction	No.	Contracts Awarded Aggregate Value	Amount Expended Fiscal Year 1958-1959
A	Major Thoroughfares	3	$ 315,830.75	$3,062.085.60
B-1	Streets - Private Contracts	35	423,990.00	448,582.00
B-2	Streets - Assessment Proceedings	17	572,473.14	465,890.52
B-3	Streets - Public Contract City Pay	14	587,920.18	589,248.41
B-4	Streets - Car Track Removal	2	405,757.75	23,325.38
C	Traffic Signals & Channelization	3	95,840.65	30,685.15
D-1	Sewers - Pipe Vitrified Clay & Concrete	5	241,328.64	537,534.62
D-2	Sewers - Concrete, Monolithic	3	710,142.26	510,802.87
E	Miscellaneous	41	473,406.75	535,231.39
	TOTALS	123	$3,826,690.12	$6,203,385.94

TABLES

On the following pages appear separate table of Current Contracts for each of the types of construction listed above. The source of the Funds used to finance each project is indicated in the Tables according to the following:

Abbreviation Legend

Designation	Description of Fund
General	General Fund City and County
Spec. Rd.	Special Road Improvement Fund
Major Sts.	Special Gas Tax Improvement Fund
Assmt Proceedings	Assessed to Property benefiting under the Street Improvement Ordinance of 1934
Pd. Prop. Owners	Cost borne by Property Owners under Private Contract
1944 Sewer Bond	Bond Issue voted by Citizens on November 7, 1944 - $12,000,000
1947 St. Imp. Bond	Bond Issue voted by Citizens on November 4, 1947 - $22,850,000
1948 Sewage Tr. Bond	Bond Issue voted by Citizens on June 1, 1948 - $15,000,000
1954 Sewer Bond	Bond Issue voted by Citizens on June 8, 1954 - $12,645,000
1947 Off Street Parking Bond	Bond Issue voted by Citizens on Nov. 4, 1947 - $ 5,000,000
1954 Laguna Honda Bond	Bond Issue voted by Citizens on Nov. 2, 1954 - $ 5,475,000

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
A - MAJOR THOROUGHFARES					
Market St. & Portola Dr. Hattie St. to Corbett Ave. (Widening & Realignment) M & K Corporation	7-18-56	12-19-58	$2,444,337.42	$480,667.42	Major St. Spec.Rd.Imp. 1944 Sewer Bd.
Portola Dr. - Twin Peaks Blvd. to Sloat Blvd. (Widening & Realignment) Chas. L. Harney, Inc.	11-6-57	99%	949,681.00	567,970.00	Major St. Spec.Rd.Imp. 1954 Sewer Bd.
7th St. - 16th St. to Townsend St. (Reconstruction) Chas. L. Harney, Inc.	12-27-57	8-15-58	154,997.74	64,302.74	Major St. 1954 Sewer Bd.
Geary Blvd. - Presidio Ave. to 33rd Ave. (Pvt. Reconstr. & Tr. Remov.) Chas. L. Harney, Inc.	1-17-58	99%	1,429,168.00	922,165.00	1947 St.Imp.Bd.
Jamestown Ave. - Ext. & Other Acc. Rds. to Bayview Sta.(Grading) Chas. L. Harney, Inc.	4-18-58	92%	1,360,950.56	773,050.00	1947 St.Imp.Bd.
Ingerson Ave. - Hawes St. to E. of Griffith St. (Viaduct,Paving,Sewers) Chas. L. Harney, Inc.	8-15-58	97%	183,568.00	167,130.00	Spec.Rd.Imp. 1944 Sewer Bd.

Jamestown Ave. - Gilroy St. to Hunters Pt. Serv. Rd. (Pavement, Sewers) The Fay Improvement Co.	9-24-58	38%	74,262.31	28,800.00	Spec.Rd.Imp. 1944 Sewer Bd.
Gilman Ave. - 3rd St. to Griffith St. (Reconstruction) Pacific Pavements Co.	10-17-58	4-9-59	58,000.44	58,000.44	Spec.Rd.Imp. Major St. 1954 Sewer Bd.
Total Awarded and Expended During Fiscal Year			$315,830.75	$3,062,085.60	

CURRENT CONTRACT DATA 1958-1959

Street or Subdivision	Impvts	Contractor	Awarded	Completed	Contract Amount
B-1 STREETS - PRIVATE CONTRACTS - PD. PROP. OWNERS					
2nd Ave. - At Parnassus Ave.	S	James Barnes Construction Co.	11-9-55	7-2-58	$ 2,000.00
Kearny St. - Lombard St. - Chestnut St.	S-Wall	Theo G. Meyers & Son	1-23-57	12-5-58	10,000.00
Marietta Dr. - Arroyo Way - Teresita Blvd.	S, C, P	Chas.L.Harney,Inc.	9-18-57	11-21-58	100,000.00
Perego Heights Subdiv. Contract #1	S	T. D. Harney	10-23-57	98%	10,000.00
Midtown Terrace Subdiv. No. 6 Contract #2	C, P	Gellert Bros.	11-20-57	9-26-58	23,000.00
Forest Knolls Subdiv. No. 1 Contract #4	C, P	Gellert Bros.	2-21-58	50%	8,000.00
Glendale St. - Market St. - 284' W	S,C,P	T. D. Harney	3-12-58	9-5-58	9,400.00
Carroll Ave. (N 1/2) Jennings St. - 375' E	C, P	Chas.L.Harney,Inc.	4-3-58	4-7-59	5,000.00
Miraloma Park Certain Streets Within	Gr	Gellert Bros.	4-11-58	12-31-58	43,500.00
Midtown Terrace Subdiv. No. 7 - Contract #2	C, P	Gellert Bros.	4-25-58	9-26-58	17,200.00
Verna St. - Teresita Blvd. 300' N	S,C,P	The Fay Impr.Co.	4-30-58	10-14-58	10,500.00

Pretor Way - Guttenberg to Concord	S,C,P	The Fay Impr.Co.	5-9-58	10-15-58	13,800.00
Hanover St. (N 1/2) Guttenberg to Concord Hanover St. (S 1/2) Guttenberg to Watt	S,C,P	The Fay Impr.Co.	5-21-58	10-15-58	12,600.00
Concord St. - Brunswick St. to Hanover St.	Gr	The Fay Impr.Co.	6-18-58	10-31-58	1,000.00
Beach St. (S 1/2) - Polk St. to 261' W	S,C,P	The Lowrie Paving Co., Inc.	6-20-58	8-15-58	4,547.00
			- - - -		- - - - -
Tompkins Ave. (S Line) Putnam St. to Bronte St.	Wall	The Fay Impr.Co.	8-22-58	11-17-58	700.00
Concord St. - Pretor Way to Hanover St.	C, P	The Fay Impr.Co.	9-12-58	4-10-59	9,600.00
Ankeny St. - Mill St. to Bishop St.(E. Line) Mill St. - Ankeny St. to 60' S	Gr	The Fay Impr.Co.	9-17-58	20%	4,000.00
Perego Hts. Subdivision (Contract No. 2)	C, P	T. D. Harney	9-19-58	0%	5,000.00
Raymond Ave. - Elliot St. to Sawyer St.	Gr	The Fay Impr.Co.	9-24-58	12-31-58	4,000.00
Army St. - 218' E of Castro St. to 443' E of Castro St.	Gr	The Fay Impr.Co.	9-24-58	70%	1,200.00
Miraloma Park, Southeast Portion (Contract No. 1)	S	Gellert Bros.	10-3-58	11-11-58	50,500.00

CURRENT CONTRACT DATA 1958-1959

Street or Subdivision	Impvts	Contractor	Awarded	Completed	Contract Amount
B-1 STREETS PRIVATE CONTRACTS - PD. PROP. OWNERS (Continued)					
*Sawyer St. (Portions) Leland Ave. to Raymond Ave.	S,C,P	John F. Coughlan	10-22-58	4-24-59	$ 6,000.00
*Concord St. (Portions Brunswick St. to Pretor Way	S,C,P	The Fay Impr.Co.	10-24-58	4-10-59	4,700.00
Miraloma Park, S.E.Portion (Contract No. 2)	C, P	Gellert Bros.	10-24-58	3-17-59	33,300.00
Bronte St. - Tompkins Ave. to 160' N	C, P	The Fay Impr.Co.	11-26-58	5-20-59	7,700.00
Midtown Terrace No. 6 (Contract No. 3)	Stairway & Walkway	Gellert Bros.	12-3-58	0%	1,500.00
Warren Dr. - Locksley Ave. to S'ly Term.	S,C,P	Gellert Bros.	12-10-58	4-17-59	34,900.00
O'Farrell St. (S 1/2) Taylor St. to W.end Term. Bldg.	Reconstr.	The Lowrie Paving Co., Inc.	12-12-58	12-16-58	1,300.00
Leidesdorff St. - Sacramento St. to Halleck St.	C, P	Cahill Construction Co.	12-17-58	50%	4,300.00
Alder St. - Ankeny to 225' N of Harkness St.	Gr	The Fay Impr.Co.	12-19-58	0%	2,000.00
Mississippi St. - 22nd St. Crossing (Close S.Portion)	Reconstr.	J.H. Fitzmaurice Co.	12-31-58	3-1-59	1,200.00

Hamilton St. - Wayland St. to Woolsey St.	S,C,P	The Fay Impr.Co.	12-31-58	6-12-59	13,000.00
*Hanover St. (Portions) Concord St. to Allison St. & Watt Ave.	C, P	The Fay Impr.Co.	1-14-59	4-10-59	6,100.00
Verna St. - 300' N and 357' N of Teresita Blvd.	S,C,P	The Fay Impr.Co.	1-16-59	75%	1,640.00
Blackwood St. - NE of 9th St. (Close)	Reconstr.	The Fay Impr.Co.	1-21-59	3-23-59	800.00
Forest Knolls Subdiv. No.2 (Contract #1)	S	Gellert Bros.	1-30-59	4-3-59	24,900.00
*Tompkins Ave. N 1/2 - Putnam St. to Bronte St.	C, P	The Fay Impr.Co.	2-4-59	6-9-59	3,150.00
Battery St. - Bush St. to Market St.	Reloc.S	The Lowrie Paving Co., Inc.	2-6-59	80%	6,500.00
Forest Knolls No. 2 (Contract #2)	C, P	Gellert Bros.	3-4-59	40%	30,000.00
Miraloma Park No. 10 (Contract No. 3)	S	Gellert Bros.	3-4-59	4-2-59	14,700.00
Wisconsin St. - S. of Mariposa St.	Reloc.S	The Lowrie Paving Co., Inc.	3-18-59	4-28-59	7,000.00
Underwood Ave. - Jennings to Ingalls St.	C, P	The Fay Impr.Co.	4-22-59	60%	16,000.00
Forest Knolls No. 3	S,C,P	Gellert Bros.	5-1-59	45%	66,000.00
Thomas Ave. - N. End	Reconstr.	Cahill Construction Co.	5-15-59	0%	1,100.00
Yosemite Ave. - Ingalls St. to Jennings St.	C, P	The Fay Impr.Co.	5-15-59	45%	22,000.00

CURRENT CONTRACT DATA 1958-1959

Street or Subdivision	Impvts	Contractor	Awarded	Completed	Contract Amount
B-1 STREETS - PRIVATE CONTRACTS - PD. PROP. OWNERS (Continued)					
Ingalls St. - Armstrong Ave. to Yosemite Ave.	C, P	The Fay Impr. Co.	5-15-59	35%	$ 5,000.00
Miraloma Park No. 10 (Contract No. 4)	C, P	Gellert Bros.	6-5-59	25%	16,200.00
Berry St. - 3rd St. to 4th St.	C, SW	The Lowrie Paving Co., Inc.	6-12-59	25%	3,000.00
Battery St. - Market St. to Bush St.	C, P	Haas & Haynie	6-24-59	0%	15,000.00
Total Awarded During Fiscal Year					$423,990.00
Total Value of Work Done During Fiscal Year					$448,582.00

S = Sewers C = Curbs P = Paving Gr = Grading

* Remaining Portions Improved Under Public Contract

CURRENT CONTRACT DATA 1958-1959

Street or Subdivision	Impvts	Contractor	Awarded	Completed	Contract Amount
B-2 - STREET ASSESSMENT PROCEEDINGS					
Prague St. - Excelsior Ave. to Brazil Ave.	S,C,P	The Fay Impr.Co.	11-20-57	7-3-58	$ 22,189.26 (7,474.86)
Detroit St. - Mangells Ave. to Joost Ave.	C,S,P	E. J. Treacy	12-20-57	7-15-58	9,453.95 (4,561.51)
Boutwell St. - Industrial St. to Helena St.	C, P	The Fay Impr.Co.	4-30-58	11-3-58	10,898.00 (None)
Crocker Amazon Tract - Streets Within	C, P	Douglass & Woodhouse	5-7-58	10-10-58	95,336.08 (47,668.04)
Rosenkranz St. - Bernal Hts. Access Rd. to 125' N	C,S,P	The Fay Impr.Co.	5-28-58	3-16-59	8,991.13 (6,294.33)
Bowdoin St. - Gavin St. to Sweeny St. & X-ing	S,C,P	M. J. Lynch	5-28-58	10-18-58	9,665.29 (2,958.17)
Burnett Ave. - Hopkins Ave. to Existing Pvt. S	C, P	The Fay Impr.Co.	6-27-58	70%	75,893.10 (37,000.00)
			- - - -		- - - - -
Mendell St. - Williams Ave. to Yosemite Ave.	S,C,P	The Fay Impr.Co.	7-2-58	12-23-58	20,954.03 (12,574.46)
Getz St. - Mt. Vernon Ave. to 213' S'ly	S,C,P	M. J. Lynch	8-8-58	12-18-58	6,923.78 (2,418.06)
Clarendon Ave. - Stanyan St. to Laguna Honda Blvd.	S,C,P	Chas.L.Harney,Inc.	10-3-58	75%	207,605.00 (180,568.90

CURRENT CONTRACT DATA 1958-1959

Street or Subdivision	Impvts	Contractor	Awarded	Completed	Contract Amount
B-2 - STREET ASSESSMENT PROCEEDINGS (Continued)					
*Sawyer St. (W'ly 1/2) - Leland Ave. to 100' N'ly	C, P	John F.Coughlan	10-22-58	4-24-59	$ 1,888.23 (1,050.60)
*Concord St. (E 1/2) - Brunswick St. to 225' S'ly	C, P	The Fay Impr.Co.	10-22-58	4-10-59	5,445.85 (2,675.25)
Yosemite Ave. - Keith St. to Jennings St.	C, P	Chas.L.Harney, Inc.	11-19-58	99%	12,731.20 (7,200.00)
Jennings St. - Van Dyke Ave. to Carroll Ave.	S,C,P	The Fay Impr.Co.	11-19-58	99%	62,158.40 (32,690.20)
France Ave. - Lisbon St. to Madrid St.	C, P	E. J. Treacy	12-10-58	4-7-59	8,919.68 (5,946.45)
*Hanover St. (N 1/2) Allison St. to 70' W & Watt Int.	C, P	The Fay Impr.Co.	1-14-59	4-10-59	3,687.17 (1,711.11)
Bonview St. - 83' to 450' S of Coso Ave.	S,C,P	M. J. Lynch	3-25-59	0%	11,490.50 (4,300.00)
Underwood Ave. (N 1/2) Jennings St. to 300' E	C, P	The Fay Impr. Co.	4-17-59	60%	5,175.00 (900.00)
Burnett Ave. - Hopkins Ave. to Dixie Alley	S,C,P	Chas.L.Harney, Inc.	4-22-59	5%	21,312.50 (2,200.00)
Allison St. (W 1/2) Brunswick St. to 25' S	SW	Mac Constr.Co.	5-20-59	25%	12,000.00 (None)

Twelfth Ave. - Taraval St. to 432' N Funston Ave. - Taraval St. to 530' N	C, P	Chas.L.Harney,Inc.	5-20-59	0%	16,636.00 (13,000.00)
Jamestown Ave. - Ingalls St. to Gilroy St.	S,C,P	Chas.L.Harney,Inc.	6-12-59	0%	87,410.00 (85,000.00)
Mangels Ave. - Detroit St. to 125' W Edna St.	S,C,P	Chas.L.Harney,Inc.	6-24-59	0%	30,927.40 (14,000.00)
Christopher Dr. - Clarendon Ave. to Crestmont Dr. Crestmont Dr. - Christopher Dr. to 775' W	S,C,P	Chas.L.Harney,Inc.	6-24-59	0%	57,208.40 (29,000.00)
Total Awarded During Fiscal Year					$572,473.14
Total Value of Work Done During Fiscal Year					$465,890.52

( ) = Estimated or Final Amount of City Obligation.
Balance through Assessment of Property Benefited.
City Funds from Special Road Improvement Fund.

S = Sewers   C = Curbs   P = Paving   SW = Sidewalk

* Remaining Portion Improved Under Private Contract.

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
B-3 STREETS - PUBLIC CONTRACT - CITY PAY					
Alemany Blvd. - San Jose Ave. & Junipero Serra Blvd. (Resurfacing) The Lowrie Paving Co., Inc.	12-18-57	7-21-58	$161,908.99	$ 55,488.99	Spec.Rd.Imp. Major Sts.
Bernal Hts.Access Rd. - Rosencranz to Carver (Grading) The Fay Impr.Co.	4-11-58	3-25-59	900.85	900.85	Spec.Rd.Imp.
Beach St. N 1/2 - Polk St. to 261' W (Curbs & Paving) The Lowrie Paving Co., Inc.	6-20-58	8-15-58	4,707.42	4,707.42	Spec.Rd.Imp.
5th St. & Mission St. Garage (Pvt. & Curb Reconstr.) Chas.L.Harney,Inc.	6-27-58	8-15-58	17,539.94	17,539.94	Spec.Rd.Imp.
Alvarado St. and Others (Brick Pvt. Repl.) The Lowrie Paving Co., Inc.	7-9-58	10-3-58	29,502.54	29,502.54	Spec.Rd.Imp. Major Sts.
Log Cabin Ranch School For Boys Access Rd. (Widening) Catherman & Judd	7-30-58	10-12-58	14,505.22	14,505.22	General

Jerrold Ave. - E/Line of Quint St. to S.P.R/W (Improvement) M.J. Lynch	8-30-58	10-31-58	14,439.75	14,439.75	Spec.Rd.Imp.
Excelsior Dist. Streets and Others (Street Resurfacing) The Lowrie Paving Co., Inc.	9-5-58	2-2-59	197,981.80	197,981.80	Major Sts.
Point Lobos Ave. & Other Streets (Brick Pvt. Repl.) Pacific Pavements Co., Ltd.	10-3-58	3-16-59	66,543.04	66,543.04	Spec.Rd.Imp. Major Sts.
S.F. Muni. Stad. West Access Rd. & Ingerson Ave. (Pvt. & Sewers)	10-8-58	85%	45,396.52	38,491.00	1944 Sewer Bd. Spec.Rd.Imp.
14th St. - Market St. to Guerrero St.(Reconstr.) The Lowrie Paving Co., Inc.	11-28-58	2-28-59	42,442.03	42,442.03	Spec.Rd.Imp.
Various Streets (Curb & Gutter Reconstruction) The Fay Impr.Co.	11-28-58	2-9-59	27,061.92	27,061.92	Spec.Rd.Imp.
Lakeside Dist.Streets and Others (Resurfacing) Pacific Pavements Co., Ltd.	12--3-58	3-12-59	62,821.18	62,821.18	Spec.Rd.Imp. Major Sts.
Tompkins Ave. (S 1/2) - Putnam St. to Bronte St. (Curb & Paving) The Fay Impr. Co.,	2-4-59	99%	3,775.20	0	Spec.Rd.Imp.

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
B-3 STREETS - PUBLIC CONTRACT - CITY PAY (Continued)					
Chapman St. - Carver St. to Folsom St. (Curb, Paving, Ret. Wall) The Lowrie Paving Co., Inc.	2-18-59	55%	$ 14,134.00	$ 7,818.00	Spec.Rd.Imp.
County Jail No. 2 - (San Mateo County) (Resurface Roads) F.D. Sperry Co.	4-17-59	5-28-59	4,304.73	4,304.73	General
Lake St. at 3rd Ave. (Curb & Pavement Replacement) The Lowrie Paving Co., Inc.	4-24-59	99%	1,813.25	0	Spec.Rd.Imp.
Hunters Pt. Service Rd. - Jamestown to Gilman (Drainage & Paving) Chas.L.Harney, Inc.	6-3-59	7%	63,199.00	4,700.00	Spec.Rd.Imp.
Total Awarded and Expended During Fiscal Year			$587,920.18	$589,248.41	

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
B-4 STREETS - CAR TRACK REMOVAL					
12th St. - Howard St. to Folsom St. (Reconstruction and Track Removal) The Fay Imp. Co.	5-21-58	8-15-58	$ 23,325.38	$ 23,325.38	Spec.Rd.Imp. 1947 St.Imp.Bd.
"B Line" - Geary Blvd. to Great Highway (Track Removal, Pavement Reconstruction & Brick Removal) Chas. L. Harney, Inc.	3-11-59	0%	226,275.75	0	Spec.Rd.Imp. 1947 St.Imp.Bd. Major Sts.
Geary St. - Market St. to Franklin St. (Track Removal, Pavement Reconstruction) Pacific Pavements Co., Ltd.	6-10-59	0%	179,482.00	0	1947 St.Imp.Bd. Muni Rwy
Total Awarded and Expended During Fiscal Year			$405,757.75	$ 23,325.38	

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
C - TRAFFIC SIGNALS & CHANNELIZATION					
Western Addition & Downtown Traffic Signal System (Interconnection of Control Wiring) Abbett Electric Co.	3-12-58	8-21-58	$ 9,121.80	$ 3,271.80	Spec.Rd.Imp.
	- - - -		- - - - - -		
Market St. - The Embarcadero to 10th St. (Signals & Channelization) 4th Contract Abbett Electric Co.	2-13-59	41%	33,481.30	12,600.00	Major Sts.
Fell & Oak Streets (Revise Traffic Signal System) Abbett Electric Co.	2-27-59	6-5-59	10,675.35	10,675.35	Spec.Rd.Imp.
Traffic Signals at Isolated Crossings - 17th Contract (Install) R. Flatland	5-6-59	8%	51,684.00	4,138.00	Major Sts. Spec.Rd.Imp.
Total Awarded and Expended During Fiscal Year			$ 95,840.65	$ 30,685.15	

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
D-1 SEWERS - PIPE, VITRIFIED CLAY & CONCRETE					
Southeast Collecting Sewers - Section K-1 (Construction) M & K Corporation	3-12-58	9-11-58	$151,224.98	$ 65,969.98	1954 Sewer Bd.
Gilman Ave. - Griffith St. to Hunters Pt. X-way (Sewers & Paving) Chas. L. Harney, Inc.	6-27-58	90%	316,312.00	285,000.00	Spec.Rd.Imp. 1944 Sewer Bd.
14th St. - Buena Vista Terr. to Alpine Terr. (Sewer Replacement) The Fay Impr. Co.	7-2-58	9-12-58	12,106.34	12,106.34	1954 Sewer Bd.
Griffith St. Outfall Sewer (Construction) M. J. Lynch	9-10-58	99%	177,214.00	142,200.00	1954 Sewer Bd.
Masonic Ave. - Panhandle Drive to Fell St. (Sewer) M. J. Lynch	10-15-58	12-18-58	4,079.50	4,079.50	1954 Sewer Bd.
Steiner St. - Union St. to Green St. Green St. - Steiner St. to Pierce St. (Sewer Replacement) McGuire & Hester	4-10-59	6-26-59	28,178.80	28,178.80	1954 Sewer Bd.

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
D-1 SEWERS - PIPE, VITRIFIED CLAY & CONCRETE (Continued)					
Newcomb St. - Rankin St. to Selby St. (Sewer Replacement) The Fay Impr. Co.	4-24-59	0%	$ 19,750.00	0	1954 Sewer Bd.
Total Awarded and Expended During Fiscal Year			$241,328.64	$537,534.62	

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
D-2 SEWERS - CONCRETE MONOLITHIC					
North Point Collecting Sewers - Sec. B-2 (Construction) Chas. L. Harney, Inc.	1-4-57	75%	$459,181.00	$137,190.00	1954 Sewer Bd.
Southeast Collecting Sewers, Sec.H-1,H-2,H-3 (Construction) McGuire & Hester	3-26-58	8-5-58	178,113.54	68,038.54	1954 Sewer Bd.
Pacific Ave. - Sansome St. to Montgomery St.(Sewer Gunite Lining) Johnson Western Gunite Co.	5-7-58	7-18-58	2,385.57	2,385.57	General
Fitch St. and Carroll Ave. (Sewer Construction & Pavement) M & K Corporation	7-9-58	3-30-59	261,788.76	261,788.76	1944 Sewer Bd. Spec.Rd.Impr.
North Point Collecting Sewers Sec. D-1 (Pump Station and Related Facilities) M & K Corporation	2-18-59	9%	438,900.00	41,400.00	1954 Sewer Bd.
Golden Gate Ave.-Steiner St. to Webster St. (Sewer Gunite Lining) Johnson Western Gunite Co.	4-24-59	0%	9,453.50	0	General
Total Awarded and Expended During Fiscal Year			$710,142.26	$510,802.87	

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
E - MISCELLANEOUS					
Christmas Tree Point - Radio Communications Center (Construction) Herrero Bros., Inc.	3-6-57	7-10-58	$277,635.55	$111,290.55	Spec.Rd.Impr. General
Laguna Honda Home - Incinerator (Construction) Martinelli Construction Co.	12-11-57	99%	44,849.00	26,175.00	General
Maintenance Yard - Sand Storage Facilities & Truck Port (Construction) Arthur Bros.	12-13-57	7-25-58	74,756.68	21,131.68	Spec.Rd.Impr. General
Richmond-Sunset Sewage Treatment Plant (Additional Office Rooms, etc.) J.C.Collins Joint Venture	1-15-58	7-31-58	31,920.27	8,670.27	1954 Sewer Bd.
Jackson Square Area (Tree Planting in S.W. Area) Bernard Gayman	1-24-58	7-23-58	2,955.76	1,005.76	Spec.Rd.Impr.
Civic Auditorium - Roof Drain & Appurtenances (Replacement) Jack Rosen, Inc.	1-31-58	8-27-58	5,130.82	2,505.82	General

23rd St. Overcrossing - at James Lick Freeway (Street Lighting System) Coopman Electric Co.	3-12-58	9-3-58	1,238.00	1,238.00	Spec.Rd.Impr.
Southeast Sewage Treatment Plant (Scum Separators & Conveyor) Adam Arras & Son	3-19-58	10-30-58	8,487.31	6,762.31	1954 Sewer Bd.
City Hall - S.W. Quadrant (Replace Waste, Vent, & Cold Water Piping) Rodoni-Becker Co.	4-18-58	9-18-58	9,383.00	6,533.00	General
Air Raid Sirens - Various Locations (Installation) Ets-Hokin & Galvan	4-11-58	7-18-58	10,331.64	2,681.64	General
County Jail No. 2 in San Mateo County (Wiring, Piping & Appurtenances Main Heating System) S & Q Construction Co.	5-9-58	8-31-58	2,485.00	910.00	General
Montgomery, Greenwich, Filbert, & Alta Sts.; Montague Place (Street Lighting System) Electric Maintenance & Service Co.	5-16-58	9-4-58	2,947.00	2,947.00	Spec.Rd.Impr.
Golden Gate Heights (Handrailing for Stairways) Ruthern Co.	5-16-58	1-21-59	6,157.00	6,157.00	Spec.Rd.Impr.

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
E - MISCELLANEOUS (Continued)					
Yosemite Ave. - 3rd St. to Mendell St. Sidewalk Narrowing) The Lowrie Paving Co., Inc.	5-21-58	12-24-58	$ 16,844.11	$ 16,844.11	Spec.Rd.Impr.
Broadway - Polk St. to Van Ness Ave. (Street Lighting System) Electric Maintenance & Service Co.	7-9-58	11-14-58	2,190.50	2,190.50	Spec.Rd.Impr.
Municipal Asphalt Plant (Additional Truck Sheds) Thos. E. McCormick	7-11-58	12-5-58	18,190.00	18,190.00	Spec.Rd.Impr.
Stanley Drive in the Vicinity of St. Charles Ave. (Tool Shed) Thos. E. McCormick	7-11-58	10-20-58	2,000.00	2,000.00	Spec.Rd.Impr.
Youth Guidance Center (Yard Lighting) Electric Maintenance & Service Co.	7-11-58	12-16-58	1,525.00	1,525.00	General
Taraval Police Sta. (Replace Boiler and Related Facilities) Cornely Co.	7-23-58	4-22-59	4,213.55	4,213.55	General
Islais Creek Incinerator at Kansas & Marin Sts. (Razing) Jos. D. Ballinger & Co.	8-1-58	11-13-58	18,850.00	18,850.00	Spec.Rd.Impr.

Christmas Tree Point Radio Communications Center (Communications Cable) Ets-Hokin & Galvan	8-1-58	12-2-58	14,411.00	14,411.00	General
Southeast Sewage Treatment Plant (Reconstruction of Grit Washer) De Narde & Ganske	8-6-58	11-7-58	3,294.00	3,294.00	General
Geary St. Expressway (Test Borings) P & Z Co.	8-13-58	9-24-58	721.25	721.25	Major Sts.
Bernal Heights Blvd. (Construct Guard Rail) Marwais Steel Co., Inc.	9-10-58	1-19-59	18,751.62	18,751.62	Spec.Rd.Impr.
Drumm St. Pump Station (Proposed)(Test Borings) P & Z Co.	10-1-58	1-13-59	1,703.40	1,703.40	1954 Sewer Bd.
Channel St. Waterway (Mud Samples) &.A. Bartee	10-3-58	1-23-59	2,187.10	2,187.10	General
Southeast Sewage Treatment Plant - Sludge Conditioning Units (Furnish & Install) C. Norman Peterson, Inc.	10-17-58	11-24-58	2,954.00	2,954.00	General
Laguna Honda Home - Fire Alarm System (Modernize) Abbett Electric Corp.	10-22-58	30%	29,675.00	8,800.00	General

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
E - MISCELLANEOUS (Continued)					
Junipero Serra Blvd. & Stanley Drive (Slope Stabil.) Thos. E. McCormick	11-14-58	1-22-59	$ 11,905.50	$ 11,905.50	Spec.Rd.Impr.
Townsend St. at Crook St. (Center Island & Fence Modification) Heide & Cremarosa	11-14-58	3-4-59	841.00	841.00	Spec.Rd.Impr.
Southeast Sewage Treatment Plant No. 3 Dryer (Reconstruction) De Narde & Ganske	11-19-58	5-8-59	17,730.26	17,730.26	General
Green St. East of Montgomery St. (Retaining Wall) McCormick Builders	11-28-58	2-18-59	2,380.75	2,380.75	Spec.Rd.Impr.
City Hall - Rms. 10 & 20 (Alter. Vent. System) Hannon Co.; Ace Sheet Metal	11-28-58	3-17-59	4,584.00	4,584.00	General
Hall of Justice - Rm.107 (Air Conditioning & Lighting) Atlas Heating & Ventilating	11-28-58	6-19-59	11,938.00	11,938.00	General

North Point Collecting Sewers - Sec. D-1 (Test Borings) P & Z Co.	12-3-58	1-5-59	1,529.50	1,529.50	1954 Sewer Bd.
26th St. & Grand View Ave. - Existing Quarry (Grade & Drain) Arthur Haskins, Inc.	12--3-58	1-28-59	890.00	890.00	Spec.Rd.Impr.
City Planning Drafting Room (Fluorescent Lighting) Decker Electrical Construction Co.	12-12-58	2-27-59	2,147.00	2,147.00	General
Market St. N. of Romain St. & Portola Drive S. of Corbett Ave. (Ret. Walls) O.C. Jones & Sons	12-26-58	5-19-59	30,011.10	30,011.10	Spec.Rd.Impr.
Civic Auditorium - Hayes St. Electric.Service (Modification) Hampton Electric & Manufacturing Co.	1-16-59	60%	5,518.00	3,780.00	General
Youth Guidance Center - Chain Link Fence & Drainage Ditch (Extension) Thos. E. McCormick	1-16-59	3-26-59	3,041.72	3,041.72	General
Geary St. - at Gough St., Laguna St., Scott St. (Fire Cisterns) Chas. L. Harney, Inc.	1-23-59	31%	75,300.00	23,000.00	General

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
E - MISCELLANEOUS (Continued)					
10th Ave. & Cabrillo St. to 9th Ave. & Irving St. (A.W.S.S. & Relocate Appurtenances) Associated Pipeline, Inc.	2-4-59	80%	$ 65,555.50	$ 52,000.00	General
Pacheco St. at 42nd Ave. & 3rd St. at 22nd St. (Air Raid Sirens) Mahoney Electric Co., Inc.	2-6-59	99%	1,622.00	0	General
Jones St. Tank - A.W.S.S. (Repair & Paint) Abco Painting Co.	2-13-59	5-1-59	4,919.00	4,919.00	General
North Point Collecting Sewers - Sec. D & Division St. Auxiliary Sewer (Test Borings) P & Z Co.	2-18-59	90%	12,260.00	10,350.00	1954 Sewer Bd.
Islais Creek Bridge (Replace Shaft) Stryco Manufacturing Co.	3-13-59	4-21-59	702.00	702.00	Major Sts.
Ashbury Tank - A.W.S.S. (Repair, Reline, & Paint) Thos. E. McCormick	3-27-59	99%	7,312.00	5,940.00	General

City Hall - NE Quadrant (Replace Piping) Jesse M. Lumsden	4-3-59	80%	$ 18,018.00	$ 14,500.00	General
City Hall - Room 57 (Replace Main Switchboard) Brayer Electric Co.	4-3-59	0%	34,181.00	0	General
S.F.F.D. Engine House No. 36 (Heating and Ventilating System) C.S. Hardemann, Inc.	4-22-59	45%	3,540.00	7,868.00	General
County Jail No. 2 (San Mateo County) (Repair Elevator Mach.) Independent Elevator Co.	4-22-59	0%	3,427.00	0	General
County Jail No. 2 (San Mateo County) (Replace Effluent Pump Piping) Wenrick & Associates	4-22-59	97%	12,460.00	10,530.00	General
Fort Sutter River Boat (Demolition) Sherman Crane Service	5-13-59	95%	8,288.00	0	General
Vicente Pumping Station (Alterations) Associated Pipeline, Inc.	6-3-59	0%	4,750.00	0	1954 Sewer Bd.
DeYoung Museum (Install Gas Burners) R. D. Miners, Inc.	6-24-59	0%	7,889.00	0	General
Total Awarded and Expended During Fiscal Year			$473,406.75	$535,231.39	

APPENDIX II

BUREAU OF ARCHITECTURE
CURRENT CONTRACT DATA SUMMARY
Showing All Contract Work Awarded or Under Construction
July 1, 1958 - June 30, 1959

Table	Type of Construction	Contracts No.	Awarded Aggregate Value	Amount Expended Fiscal Year 1958-1959
A-1	New School Construction	5	$ 4,238,712.00	$2,244,710.72
A-2	Misc. Alterations - Schools	36	759,602.82	654,405.40
A-3	Acoustical Jobs - "	4	25,659.00	2,995.00
A-4	Roofing Jobs - "	5	16,961.00	52,839.36
A-5	Resilient Flooring "	1	1,570.00	33,468.00
A-6	Int. & Ext. Painting "	12	115,442.00	235,870.63
A-7	Yard Paving - "	4	30,680.00	63,742.00
B-1	Fire Dept. - New Construction	1	321,500.00	104,943.00
B-2	Fire Dept. - Reconstruction	-o-	-o-	19,584.96
C-1	S.F. General Hospital	11	1,501,126.00	784,500.74
C-2	Laguna Honda Home	3	841,099.00	1,293,257.54
D	M H DeYoung Memorial Museum	3	89,273.00	13,740.00
E	Youth Guidance Center	7	131,370.00	133,740.00
F	Civic Center	18	75,723.40	58,143.30
G	Hall of Justice	3	14,004,888.00	2,427,662.44
H	Miscellaneous	7	142,348.00	1,145,229.12
	TOTALS	120	$22,295,953.82	$9,268,832.21

On the following pages appear separate tables of current contracts for each of the types of construction listed above. The source of the funds used to finance each project is indicated in the tables according to the following:

Abbreviation Legend

Designation	Description of Fund
General	General Fund City and County
1948 School	Unified School District, bond issue voted by citizens on November 2, 1948, $48,890,000.00
1956 School	Unified School District, bond issue voted by citizens on November 6, 1956 $27,000,000.00

1952 Fire	Fire Department, bond issue voted by citizens on November 4, 1952, $4,750,000.00
1954 Hospital	Hospital, bond issue voted by citizens on November 2, 1954, $5,830,000.00
1954 L.H.H.	Laguna Honda Home, bond issue voted by citizens on November 2, 1954 $5,475,000.00
1954 Ex. Hall	Civic Center Exhibit Hall bond issue voted by citizens on November 2, 1954, $3,275,000.00
1956 Justice	New Hall of Justice bond issue voted by citizens on June 5, 1956, $19,475,000.00

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
A-1 NEW SCHOOL BUILDINGS					
Silver Avenue JHS (1415)					
Rothschild, Raffin & Weirick	11-9-56	9-2-58	$1,745,431.41	$ 331,866.07	General
Herman Lawson Co.	11-9-56	9-2-58	348,639.21	53,408.05	
Emil J. Weber Electric Co.	11-9-56	9-2-58	132,738.82	23,446.02	
Starr King Elem.School Addition (1565)					
McBroom & Cecchini	2-7-58	4-14-59	285,200.00	228,177.22	1956 School
Silver Avenue JHS (1573)					
Cahill Construction Co.	3-19-58	90%	1,035,542.00	808,630.00	1956 School
J. O'Connell Voc. & Tech. Inst. New Gymnasium Bldg. (1589)					
Ira H. Larsen Co.	5-23-58	5-18-59	264,611.00	264,606.36	1956 School
Balboa HS, Athletic Field (1618) Improvements, Proj. 119, HS Phys. Ed.					
Chas. L. Harney, Inc.	5-28-58	9-5-58	26,400.00	26,400.00	1956 School
Longfellow Elem. School (1646)					
Louis C. Dunn, Inc.	11-21-58	12%	844,000.00	275,244.00	1956 School
Francisco Jr. High Addition (1687)					
Peter Sartorio	1-23-59	12%	578,000.00	62,424.00	1956 School
Geo. Washington High - Improvements to Athletic Field (1648R)					
Martinelli Construction Co.Inc.	3-4-59	48%	107,612.00	51,705.00	1956 School

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Ccompleted Date or %	Contract Amount	Amount Expended 1958-1959	Fund
A-1 NEW SCHOOL BUILDINGS (continued)					
City College - Arts & Classrooms Bldg. Athletic Field - Addns to Cafeteria Gymnasiums (1697) Louis C. Dunn Inc.	4-10-59	6%	$2,245,600.00	$ 118,804.00	1956 School
Portola Jr. High Addition - General construction (1717) Pacific Coast Builders	5-29-59	0	463,500.00	0	1956 School
Total Awarded and Expended during Fiscal Year			$4,238,712.00	$2,244,710.72	

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
A-2 MISCELLANEOUS ALTERATIONS					
Spring Valley School (Exterior Alterations) (1581) Wm. McIntosh & Son	3- 5-58	9-17-58	$ 17,307.00	$ 17,307.00	General
Mission HS (Alter. & Conver. Heating Plant) (1584) Robert M. Johnson	3- 5-58	10-24-58	72,137.13	72,137.13	General
Jean Parker School (Retaining Wall and Fence) (1606) Ben Bearse	4-16-58	7-24-58	1,947.00	1,947.00	General
Mission HS (Exterior Alterations) (1609) Wilco Construction Co.	4-16-58	8-15-58	17,422.00	17,422.00	General
Commodore Stockton School (Ext. Reconst.& Roof Rprs) (1597) R. J. Bergantz	4-18-58	8-26-58	15,278.28	15,278.28	General
Commodore Stockton School (Int. Alter.,School Addition (1612) Wm. McIntosh & Son	5-7-58	9-8-58	1,680.00	1,680.00	General
Two Child Care Centers - Edison & Laguna-Golden Gate (Paint & Plywood Siding work) (1603) Crown Construction Co.	5-7-58	8-6-58	1,342.00	1,342.00	General

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
A-2 MISCELLANEOUS ALTERATIONS (continued)					
George Washington HS (Int. Communication System) (1623) F. A. Thomas Co., Inc.	5-23-58	10-14-58	$ 7,029.00	$ 7,029.00	General
Heating Plants (Alt. & Conv.)(1621) Roosevelt JHS, Sheridan, B. Franklin-Adult Div., E. R. Taylor, Farragut, F. McCoppin, Garfield, & J. Serra School Broadway Plumbing Co.	5-23-58	9-1-58	40,975.00	40,975.00	General
Horace Mann JHS (Alter. Girls' Gym. Area) (1615) Stenmark Construction Co.	6-6-58	1-27-59	85,354.00	88,712.08	Bond
Portable Classrooms (Relocation from Denman JHS to Balboa HS, & Portola JHS to Andrew Jackson (1628) Lewis J. McDermott	6-18-58	9-5-58	20,966.00	20,966.00	General
Portable Classrooms (Relocation from F. Burk to A. Lincoln HS, City College, & P. Revere Annex (1630) H. E. Rahlmann Co.	6-25-58	11-14-58	57,342.83	57,342.83	General
Various Schools (Addn. of Window Vents- F. Burk School & L. Burbank JHS) (1635) DeNarde & Ganske	6-27-58	2-17-59	598.00	598.00	General

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
A-2 MISCELLANEOUS ALTERATIONS (continued)					
Various Schools (Bldg. Repairs-City College of SF & seven other schools) (1634) DeNarde & Gamske	7-9-58	11-24-58	$ 28,500.00	$ 29,089.85	General
Various Schools (Equip. installation, A. Lincoln HS & B. Franklin Adult School) (1649) Bureau of Bldg. Repair- DPW	7-18-58		1,375.00	1,375.00	General
Pacific Heights School (Interior Alterations) (1642R) Ben Bearse	7-25-58	10-2-58	1,975.00	1,975.00	General
Polytechnic HS (Electrical Service & Feeder Alter.) (1647) Emil J. Weber Electric Co.	7-25-58	2-3-59	38,000.00	38,779.52	General
Balboa HS (Irrigation System of Playing Field) (1654) Cascade Engineering Co.	8-22-58	11-5-58	2,689.00	2,689.00	Bond
Various Schools (Wirework Panels & Iron Grilles at J. Muir & Dudley Stone Schools) (1656) S.F. Wire & Iron Works	8-22-58	11-12-58	449.82	449.82	General
Yerba Buena Child Care Center (Install Hot Water Heater) (1658) Bureau of Bldg.Repair- DPW	8-22-58		627.00	627.00	General

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expanded 1958-1959	Fund
A-2 MISCELLANEOUS ALTERATIONS (continued)					
Northridge Child Care Center (Repair. & Replace Fence)(1661) Bureau of Bldg.Repair- DPW	8-27-58		$ 745.00	$ 745,00	General
City College of S.F. (Line Paint. for Parking Lot) (1672) The Empire Company	10-1-58	11-25-58	690.00	690.00	General
Galileo HS (Repair to Passenger Elevator No.15620) (1663R) Westinghouse Elec. Corp.	10-1-58	1-7-59	3,400.00	3,400.00	General
Board of Education (Alter. to Cafeteria Kitchen) (1670) Bureau of Bldg.Repair- DPW	10-31-58		1,290.00	1,290.00	General
Twin Peaks School Annex (Int. Renovating) (1685) McCormick Builders	11-21-58	3-25-59	15,444.00	15,747.89	General
Portable Classrooms (Relocation of Bldgs. from F.Burk, Double Rock & Longfellow Schools to B. Carmichael & W. Portal Schools) (1675) H. E. Bahlmann Co.	11-21-58	3-3-59	36,848.00	36,848.00	General
New Library, Polytechnic HS (1690) Stenmark Constr. Co.,Inc.	1-14-59	6-16-59	52,127.00	52,127.00	1954 Bond

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
A-2 MISCELLANEOUS ALTERATIONS (continued)					
Log Cabin Ranch (New Air & Water Lines for Woodwork.& Auto Shops) (1698) Bureau of Bldg.Repair DPW	1-23-59		$ 630.00	$ 630.00	General
George Washington HS (additional Telephones to Int.Comm.System) (1693R) F. A. Thomas Co.,Inc.	1-23-59	7-16-59	336.00	0	1956 Bond
P. A. Hearst & 6 other schools-(Install & repair Chain Link Fences) (1705) ElDorado Fence Co. Inc.	2-11-59	5-18-59	5,925.00	5,925.00	General
A. Lincoln HS & 12 other schools-(New Yard Benches and repair to existing) Series 1 (1700) DeNarde & Ganske	2-11-59	4-29-59	9,690.00	9,690.00	General
Miraloma School & 15 others-(New Yard Benches & repair to existing) Series 2 (1704) Bureau of Bldg.Repair- DPW	2-18-59		12,296.00	12,296.00	General
A. Lincoln HS & J. Parker School (Installation of handrails) (1706) Fair Manufacturing Co.	2-20-59	4-6-59	1,227.00	1,227.00	General

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
A-2 MISCELLANEOUS ALTERATIONS (continued)					
Balboa HS (Alt. to Viewing stand for Boys' Lockers & Shower Facilities (1640) Amoroso Construction Co.	3-13-59	26%	$109,670.00	$ 23,605.00	Bond
George Washington HS (Repairs to Elec. Pass. Elevator) (1676R) Independent Elevator Co. Inc.	3-4-59	7-2-59	1,388.00	1,388.00	General
H. Mann Jr. HS (Alt. to Art Rooms & Shops) (1715) Amoroso Construction Co.	4-3-59	20%	73,510.00	17,934.00	Bond
Aptos and P. Revere Schools (Floor reconstruction)(1729) McGahey & Olson	4-24-59	0	7,513.00	0	General
J. Lick Jr. HS-Administration Building (Alt. & Conv.of Heating Plants) (1727) Jack Rosen	4-24-59	35%	94,855.00	29,879.00	General
Lowell HS (Repairs to Fire Escapes) (1730) Wm. McIntosh & Son	5-8-59	8-14-59	6,980.00	0	General
Polytechnic HS (Alt. to Kitchen & Cafeteria) (1709) Stenmark Construction Co.	5-20-59	20%	96,557.00	17,380.00	Bond

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1558-1959	Fund
A-2 MISCELLANEOUS ALTERATIONS (continued)					
H. Mann Jr. HS (Library, various Room Alt. & New Storage Bldg.) (1731) Wm. McIntosh & Son	5-20-59	14%	$ 46,687.00	$ 5,882.00	Bond
B. Franklin Adult School (Equipment Instal.) (1753) Bureau of Bldg.Repair-DPW	5-29-59		1,392.00	0	General
Columbus School (Window replacement) (1751) Wm. McIntosh & Son	5-29-59		7,856.00	0	General
H. Hoover Jr. HS (Equipment Installation) (1755) Wm. McIntosh & Son	6-5-59		1,886.00	0	General
Jefferson School (Partial Demolition of E.Wing) (1768) Passetti Trucking Co.	6-16-59		725.00	0	General
Roosevelt Jr. HS (New Play Yard & Classroom Relocation) (1741) Wm. McIntosh & Son	6-17-59		50,478.00	0	Bond
Relocation pf Portable Classroom Bldgs.from F. Burk School to new Location (1739) Wm. McIntosh & Son	6-17-59		10,145.00	0	General

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
A-2 MISCELLANEOUS ALTERATIONS (continued)					
Polytechnic HS (Alterations to Basement Floor of Academic Bldg.) (1724) Stenmark Construction Co.	6-17-59		$ 35,374.00	0	Bond
J.A. O'Connell Voc. HS (Alterations to Acetylene MAnifold) (1765) Bureau of Bldg. Repair-DPW	6-26-59		323.00	0	General
Total Awarded and Expended During Fiscal Year			$ 759,602.82	$654,405.40	

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
A-3 ACOUSTICAL JOBS					
Alamo School (Main Floor Hallway) (1638) F. E. Connell & Son	7-9-58	9-5-58	$ 295.00	$ 295.00	General
Sheridan School (1710) Johns-Manville Sales Corp.	3-11-59	8-12-59	8,234.00	0	1948 School
Farragut School (1711) Western Asbestos Co.	3-13-59	37%	7,240.00	2,250.00	1948 School
Commodore Stockton School (1712) Western Asbestos Co.	3-20-59	2.2%	9,890.00	450.00	1948 School
Total Awarded and Expended during Fiscal Year			$25,659.00	$2,995.00	

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
A-4 ROOFING JOBS					
Mission HS (Reroof. & Waterproof.) (1585) Regal Roofing Co.,Inc.	3-19-58	8-6-58	$ 27,034.36	$ 27,034.36	General
Administration Bldg. (Reroof. portion of) (1627) Regal Roofing Co.,Inc.	6-6-58	8-12-58	7,243.00	7,243.00	General
Northridge Child Care Center (Reroofing) (1637) Cooper Bros.Roofing Co.	6-25-58	10-3-58	829.00	754.00	General
Child Care Centers (2) (Reroof. Jefferson & Argonne Nurseries) (1636) Regal Roofing Company	6-25-58	10-8-58	847.00	847.00	General
Laguna Honda School (Reroofing) (1639) Regal Roofing Co.	7-9-58	9-10-58	4,549.00	4,549.00	General
3. Washington HS (Reroofing of Shop Bldg.) (1643) Regal Roofing Co.	7-18-58	10-12-58	3,672.00	3,672.00	General
ity College (Reroofing Portion of Science Bldg.) (1669) Regal Roofing Co.	10-10-58	12-5-58	4,558.00	4,558.00	General

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
A-4 ROOFING JOBS (continued)					
Twin Peaks School Annex (Reroofing & New Leaders)(1680R) Western Roofing Co.	11-21-58	1-20-59	$ 2,971.00	$ 2,971.00	General
Log Cabin Ranch School (Reroofing & Waterproofing of Shops & Quonset Bldgs.) (1695) Regal Roofing Co.	12-31-58	2-17-59	1,211.00	1,211.00	General
Total Awarded and Expended During Fiscal Year			$16,961.00	$52,839.36	

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
A-5 RESILIENT FLOORING					
Commodore Stockton School, Child Care Center (New Resilient Flooring) (1551) Stenmark Construction Co.	3-5-58	7-31-58	$ 3,097.00	$ 3,097.00	General
Starr King School (Resilient Flooring) (1604) Floorcraft Contract Div.	4-16-58	8-15-58	8,490.00	8,490.00	General
(Various Schools - Floor Reconstruction) Balboa & Mission HS, Bryant, Cleveland, Laguna Honda, Sheridan, Francis S. Key, and Excelsior (1619) Arthur W. Baum	5-14-58	8-15-58	20,311.00	20,311.00	General
Ulloa School Annex (Resilient flooring) (1657) West Coast Linoleum & Carpet Co.	8-27-58	1-9-59	1,570.00	1,570.00	General
Total Awarded and Expended during Fiscal Year			$33,468.00	$33,468.00	

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
A-6 INTERIOR AND/OR EXTERIOR PAINTING					
Visitacion Valley School (Interior Painting) (1582) Robert A. Thompson	3-5-58	8-25-58	$ 13,400.00	$ 13,400.00	General
Marina Jr HS (Interior Painting) (1586) J. Wm. Sorenson	3-19-58	8-15-58	32,456.00	32,456.00	General
Alvarado School (Interior & Exterior Painting) (1578R) Robert A. Thompson	3-28-58	9-22-58	25,053.20	23,052.20	General
Lawton School (Interior Painting) (1599) Haney & Robertson	3-28-58	8-25-58	13,624.00	13,624.00	General
Paul Revere School (Interior & Exterior Painting) (1614) W. G. Thompson	5-7-58	8-25-58	13,320.00	13,320.00	General
Galileo HS (Interior Painting) (1608R) D. Zelinsky & Sons	5-7-58	8-25-58	46,717.00	46,717.00	General
Balboa HS (Exterior Painting) (1617) W. G. Thompson	5-14-58	8-21-58	46,440.00	46,440.00	General
Geary Elem. School (Interior Painting (1622) New Method Paint.& Decorating Co.	5-14-58	7-31-58	7,988.00	7,988.00	General

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
A-6 INTERIOR AND/OR EXTERIOR PAINTING (continued)					
Administration Bldg. (Interior Painting of Cafeteria) (1605) Manor Painters	5-28-58	9-22-58	$ 1,032.00	$ 1,383.50	General
Grattan School (Exterior Painting (1662) J. Wm. Sorensen Painting Co.	9-5-58	1-8-59	9,467.00	9,311.44	General
Edison Child Care Center (1708) J. Wm. Sorensen Painting Co.	2-20-59	5-22-59	2,983.00	3,767.49	General
Sheridan School (Exterior Painting) (1721) Phoenix Painting Co.	4-3-59	48%	8,200.00	3,542.00	General
Cleveland School (Interior Painting (1719) New Method Paint. & Decor.Co.	4-3-59	0	7,866.00	0	General
Pacific Heights School (Interior Painting) (1718) New Method Paint. & Decor. Co.	4-10-59	25%	19,920.00	4,482.00	General
Lincoln School (Interior & Exterior Painting) (1720) Perfection Paint. Co.	4-24-59	25%	6,724.00	1,513.00	General
Twin Peaks Annex (Exterior Painting) (1714B) Veterans Paint Co.	4-24-59	6-30-59	3,600.00	3,600.00	General

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
A-6 INTERIOR AND/OR EXTERIOR PAINTING (continued)					
Various Schools (Game Line Painting) Series 1 (1732) Riley's Striping Service	5-8-59	0%	$ 1,185.24	0	General
Various Schools (Game Line Painting) Series 2 (1737) Bureau of Bldg. Repair-DPW	5-8-59		790.00	$ 790.00	General
Garfield School (Exterior Painting) (1734) Manor Painters	5-8-59	0%	4,762.00	0	General
Sunshine Health & Orthopedic School (Exterior Paint) (1733) Veterans' Paint Co.	5-8-59	30%	12,445.00	$ 3,734.00	General
J. Denman Jr. HS (Interior Painting) (1738) J Wm. Sorenson Paint.Co.	5-20-59	20%	37,500.00	6,750.00	General
Total Awarded and Expended during Fiscal Year			$115,442.00	$235,870.63	

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
A-7 YARD PAVING					
(Various Schools- Resurfacing Yard Paving) Sherman, Edison, R. Weill, Cabrillo, Alamo (1624) Malott & Peterson-Grundy	6-6-58	8-13-58	$ 12,978.00	$ 12,978.00	General
(Various Schools- Resurfacing Yard Paving) J. Lick Jr. HS, Sunnyside, Com.Stockton, P. Revere, Garfield, Starr King (1625) Malott & Peterson-Grundy	6-18-58	8-22-58	17,916.00	17,916.00	General
(Various Schools- Resurfacing & painting game lines) Cleveland & 5 others (1626) Malott & Peterson-Grundy	6-27-58	8-29-58	29,703.00	29,703.00	General
Twin Peaks School Annex (Resurfacing Yard Paving, Painting Game lines & Fence Repair) (1681) O. C. Jones & Sons	11-21-58	2-24-59	3,145.00	3,145.00	General
(Various Schools- Resurfacing & Paint.Game Lines- Series 2) (1743) Malott & Peterson-Grundy	5-29-59	0	23,847.00	0	General
Page, Broderick & Gough-Page Child Care Centers (Resurfacing) (1759) Malott & Peterson-Grundy	6-17-59	0	1,847.00	0	General

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
A-7 YARD PAVING (continued)					
Mission Child Care Center Yard Paving (1700) The Lowrie Paving Co., Inc.	6-17-59	0	$ 1,841.00	0	General
Total Awarded and Expended During Fiscal Year			$30,680.00	$63,742.00	

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
B-1 FIRE DEPARTMENT - NEW CONSTRUCTION					
Engine House No. 21 - Proj. 5 (Gen. Construction, Plumbing, Mechanical & Electrical Work)(1561) Peter Sartorio	12-4-47	11-7-58	$182,511.00	$104,943.00	1952 Fire
Engine No. 15 - Proj. 107 (Gen. Construction, Plumbing, Mechanical & Electrical) (1722) Clovis Construction Co.	4-29-59	0	321,500.00	0	1952 Fire
Total Awarded and Expended During Fiscal Year			$321,500.00	$104,943.00	

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
B-2 FIRE DEPARTMENT - RECONSTRUCTION					
Engine House No. 24 - Proj. 122 (Gen. Construction - Electrical Work (1575) Maurice L. Rosano, Inc.	3-12-58	8-21-58	$ 15,691.96	$ 11,807.96	1952 Fire
Ashbury Tank (Tank Attendants' Quarters, 1234 Clayton St.) (1594) Thomas E. McCormick	4-30-58	8-22-58	7,777.00	7,777.00	1952 Fire
Total Awarded and Expended During Fiscal Year				$19,584.96	

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
C-1 DEPARTMENT OF PUBLIC HEALTH San Francisco General Hospital					
TB Bldg. 50, Proj. IV, Phase B, Parts 2 and 3 (1621) Wm. McIntosh & Son	10-18-57	5-6-59	$469,898.00	$ 316,629.97	1954 Hosp.
New Passenger Elevator Connecting Corridors btw wards Bldgs. 20 & 30 (1569) Otis Elevator Co.	2-7-58	1-16-59	32,426.00	32,317.00	1954 Hosp.
General Construction, Locker Dress. Rms. & Connecting Corridors (1570) McBroom & Cecchini	2-7-58	3-25-59	233,391.00	264,774.26	1954 Hosp.
Cobalt Therapy Unit, General Construction (1611) McBroom & Cecchini	6-25-58	3-13-59	35,785.00	35,865.51	1954 Hosp.
General Construction of Connecting Corridors btw ward Bldgs. 30 and 40 (1591) Hart & Hynding, Inc.	7-2-58	59%	287,420.00	171,452.00	1954 Hosp.
New Passenger Elevator Connecting Corridors btw Ward Bldgs. 30 and 40 (1592) Pacific Elevator & Equipment Co.	7-2-58	0	35,531.00	0	1954 Hosp.
General Construction, Ward Bldg. 40, Proj.3, Phase D, Part 2 (1590) McBroom & Cecchini	7-11-58		455,753.00	312,934.00	1954 Hosp.

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
C-1 DEPARTMENT OF PUBLIC HEALTH San Francisco General Hospital	(continued)				
Roofing and Masonry Parapet Repairs, Administration & Service Bldgs. (1652) Wm. McIntosh & Son	9-12-58	1-23-59	$32,387.00	$32,387.00	General
New Elevator & Related Work Isolation Bldg. 100 (1671) Wm. McIntosh & Son	11-14-58	50%	78,589.00	35,941.00	General
Corridor Doors for Maternity Bldg. (1684) Ben Bearse	11-21-58	5-12-59	1,975.00	1,975.00	General
Recreation Area for Psychiatric patients (1691) O. C. Jones	1-9-59	90%	7,940.00	6,431.00	Bond
Nurses' Call System - Maternity Bldg. No. 80 (1701) Coopman Electric Co.	2-25-59	7-1-59	9,888.00	9,888.00	Bond
Curtain Cubicles & Track Installation, Maternity Bldg. 6th Floor (Gynecology) (1707) Acme Building Specialties	2-27-59	5-29-59	1,145.00	1,145.00	Bond
Consolidation of Laboratories Bldgs. 100, 200, 300 & 4 Project 4 (1696) Arntz Construction Co.	3-25-59	9%	558,563.00	47,147.00	Bond

CURRENT CONTRACT DATE 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
C-1 DEPARTMENT OF PUBLIC HEALTH San Francisco General Hospital	(continued)				
General Construction of New P.G.& E. Service - Proj. II Service Bldg. (1735) Stenmark Construction Co.	5-27-59	0	$ 31,935.00	0	Bond
Total Awarded and Expended during Fiscal Year			$1,501,126.00	$784,500.74	

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
C-2 DEPARTMENT OF PUBLIC HEALTH Laguna Honda Home					
Laundry Modernization, Proj. 7 (1518R) S. J. Amoroso Construction Co.	9-13-57	8-20-58	$ 145,865.44	$ 31,506.44	1954 LHH
Ward Bldgs. D & G - Alterations Proj. 8 (1476R) S. J. Amoroso Construction Co.	11-8-57	1-21-59	565,469.00	363,189.52	1954 LHH
M & O Bldgs. & Related Work Proj. 5 (1485) S. J. Amoroso Construction Co.	11-8-57	5-5-59	394,927.00	305,628.40	1954 LHH
Ward Bldg. "C" & Related Work (1572) Stenmark Construction Co.	3-7-58	3-6-59	151,871.00	119,397.23	General
Steam Mains & Related Work (1574) Adam Arras & Son	3-7-58	2-26-59	128,701.00	70,537.46	General
Miscellaneous Alterations Proj. "D" (1577) S. J. Amoroso Construction Co.	3-7-58	8-29-58	42,172.00	20,212.00	General
Ward Bldgs. E & F, Interior Alterations, Proj. 8-A (1610) S. J. Amoroso Construction Co.	10-10-58	55%	440,750.00	223,918.00	General

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
C-2 DEPARTMENT OF PUBLIC HEALTH Laguna Honda Home (continued)					
Exterior Painting & Waterproofing & Misc. Repairs (1674) Arthur W. Baum	10-17-58	2-19-59	$ 12,395.00	$ 13,897.49	General
Ward Bldg. "K", Alterations & Related Work (1665) S. J. Amoroso Construction Co.	12-17-58	48%	330,085.00	144,971.00	General
Alterations to 2 Pass. Elevators Ward Bldg. "K" (1651R) Pacific Elevator & Equipment Co.	1-30-59	0	56,894.00	0	General
New Resilient Flooring - Dining Rooms, Wards M1, M2, M3 & M4 (1757) Floorcraft	5-29-59	8-19-59	975.00	0	General
Total Awarded and Expended during Fiscal Year			$841,099.00	$1,293,257.54	

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
D- M. H. DE YOUNG MEMORIAL MUSEUM					
Alterations & Repair of Pneumatic Control Lines & Valves (1629R) Johnson Service Co.	6-27-58	1-15-59	$ 453.00	$ 453.00	General
Repairing Roof Leak, Cakes Room (1688) Bender Roofing Co.	11-21-58	3-13-59	196.00	196.00	General
Reroofing portion of Central Wing (1716) S.F. Home Owners Service	3-20-59	5-19-59	2,136.00	2,136.00	General
New Skylighting & Reroofing East Wing (1728) DeNarde & Ganske	5-8-59	14%	86,941.00	10,955.00	General
Total Awarded and Expended during Fiscal Year			$89,273.00	$13,740.00	

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
E- YOUTH GUIDANCE CENTER					
Log Cabin Ranch School for Boys, San Mateo Co. (General grading for Master Plan Site) (1607) J. O. Archibald	5 16-58	7-23-58	$ 6,992.00	$ 6,992.00	General
Log Cabin Ranch School for Boys San Mateo Co. (Miscellaneous Site Work) (1633R) J. O. Archibald	7-23-58	11-14-58	4,200.00	4,200.00	General
Log Cabin Ranch School for Boys, San Mateo Co. (Gen. Const. of Mess Hall & Warehouse, Proj. 3) (1580) Peter Sartorio	8-20-58	6-23-59	102,298.00	107,898.00	General
Log Cabin Ranch School for Boys, San Mateo Co. (Site Grading & Paving, Phase 3) (1653) J. O. Archibald	8-27-58	10-15-58	1,990.00	1,990.00	General
Youth Guidance Center (Handrails and Stair Treatment) (1667) Arthur W. Baum	9-26-58	12-11-58	3,175.00	3,175.00	General
Log Cabin Ranch (New fire lines & related work) (1686) Bureau of Building Repair- DPW	12-5-58		9,485.00	9,485.00	General

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
E- YOUTH GUIDANCE CENTER (continued)					
Youth Guidance Center - Alterations to Boys' Cottage B-1 (1740) Stenmark Construction Co., Inc.	5-20-59	0	$ 3,627.00	0	General
Log Cabin Ranch School for Boys Additional Hose Carts, etc. (1754) Bureau of Building Repair-DPW	6-17-59	0	6,595.00	0	General
Total Awarded and Expended during Fiscal Year			$131,370.00	$133,740.00	

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
F- CIVIC CENTER					
City Hall (Paint Exterior Ornamental Metal, 2nd Floor Balconies) (1568) D. Zelinsky & Sons	1-31-58	7-9-58	$ 7,065.00	$ 3,565.00	General
Civic Auditorium (Main Arena Ceiling Drapery) (1645) Stuart Company	7-3-58	10-3-58	4,991.00	4,991.00	General
City Hall (Paint Exterior Ornamental Metal, 2nd Floor Balconies) (1641) D. Zelinsky & Sons	7-9-58	9-25-58	3,645.0	3,645.00	General
Brooks Hall, Civic Center (Woven Wire Fence & Door) (1659) Michel & Pfeffer Iron Works	8-20-58	11-19-58	570.00	570.00	General
City Hall (Paint. Exterior Wood Sash & Trim) (1664) J. Wm. Sorensen	9-17-58	12-5-58	3,611.00	3,611.00	General
City Hall (Paint. Ornamental Metal Main Entries) (1678) D. Zelinsky & Sons	10-10-58	12-17-59	1,970.00	1,970.00	General
Brooks Hall, Civic Auditorium (Sprinkler System Water Flow Alarm) (1679) Abbett Electric Corp.	10-17-58	1-9-59	250.00	250.00	General

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
F- CIVIC CENTER (continued)					
City Hall (Alter. Post Office, First Floor) (1660R) Leon Carlen	10-22-58	1-14-59	$ 3,542.00	$ 3,542.00	General
City Hall (Paint. Ornamental Plaster, North & South Corridors of Rotunda) (1677) Dave Russ	10-29-58	12-24-58	3,439.00	3,439.00	General
Civic Auditorium (Window & Plaster Repair) (1673) Arthur W. Baum	10-29-58	2-6-59	2,415.00	2,697.30	General
Civic Center Exhibit Hall (Modification Center Posts for Roll-up Gates in Truck Area (1683) The Cookson Company	11-5-58	4-22-59	1,958.00	1,958.00	Bond
City Hall Court Rooms (Double-acting Door Hardware (1682) Bureau of Building Repair-DPW	11-26-58		2,863.40	2,863.40	General
City Hall - First Floor (1692) Marble Floor Repairs Clervi Marble Co.	12-5-58	2-19-59	1,998.00	1,998.00	General
City Hall - First Floor (Refinish base Metal Entrance Doors) (1699) J. H. Kaatz	12-31-58	2-5-59	789.00	789.00	General

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
F- CIVIC CENTER (continued)					
Veterans Building, War Memorial - (General Repair of Exterior) (1725) J. D. Tucker & Sons	4-1-59	6-30-59	$ 22,255.00	$ 22,255.00	General
Alterations to Controller's Offices Payroll Division, Ground Floor of City Hall (1745) H. E. Rahlmann Co.	5-27-59	8-4-59	4,388.00	0	General
Painting Ornamental Iron Fences War Memorial Court of Honor (1752) Bureau of Building Repair-DPW	5-27-59	0	4,300.00	0	General
Fabric Wall Covering, S.F. Museum of Art, Veterans Memorial Bldg. (1756) Ink Ribbon Mfg. Corp.	6-12-59	0	978.00	0	General
Alterations to City Attorney's Office, Third Floor, City Hall (1762) Antone Petersen & Sons	6-26-59	0	11,761.00	0	General
Total Awarded and Expended During Fiscal Year			$ 75,723.40	$ 58,143.30	

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
G- NEW HALL OF JUSTICE					
New Hall of Justice (General Excavation & Foundation Piling, Phase I) (1601) M & K Corporation	4-18-58	5-7-59	$889,000.00	$ 923,707.44	1956 H.Justice
New Hall of Justice (General Construction, Plumbing, Mechanical & Electrical Wk. Phase II) (1620) M & K Corporation	11-19-58	12%	13,508,500.00	1,503,955.00	1956 H.Justice
New Hall of Justice (Elevators) (1620-A) Otis Elevator Co.	11-19-58	0	465,888.00	0	1956 H.Justice
New Hall of Justice (Topsoil, Finish Grading & Planting) (1620-B) Rudolph Watson	11-19-58	0	30,500.00	0	1956 H.Justice
Total Awarded and Expended During Fiscal Year			$14,893,888.00	$2,427.662.44	

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
H- MISCELLANEOUS					
North Beach Branch Library (General Construction) (1564) Martinelli Construction Co.	3-7-58	12-12-58	$ 180,274.00	104,956.64	General
California Palace of Legion of Honor (Bldg.Exterior Rprs.)(1587) Arutz Bros.	3-19-58	12-19-58	135,454.00	104,315.06	General
Automotive Repair Shops for Purchasing Dept. (1595) Morris Daley	4-30-58	6-30-59	779,504.00	775,817.46	General
San Francisco County Jail No.2 (Window Rprs.- Men's Bldg.) (1613) Bureau of Bldg.Repair-DPW	5-7-58		6,542.00	6,542.00	General
Veterans' Memorial Bldg.(Steam Clean. & Gen.Rpr. of Ext.) (1602) Arthur W. Baum	6-11-58	11-21-58	24,237.00	26,037.00	General
Veterans' Memorial Bldg.(Fabric Wall Covering, S.F. Museum of Art) (1632) Fred E. Turner Co.	6-18-58	8-26-58	791.00	791.00	General
150 Otis St.(Misc.Acous. Work, Public Welfare Dept. (1644) F. K. Pinney, Inc.	6-27-58	10-9-59	1,692.00	1,692.00	General

CURRENT CONTRACT DATA 1958-1959

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1958-1959	Fund
H- MISCELLANEOUS (continued)					
Main Library (Rprs. to Bronze Handrails - Emergency (1650) C. E. Toland & Son	7-21-58	10-21-58	$ 1,586.00	$ 1,586.00	General
Automotive Repair Shops for Purchasing Dept.- Bldg."C" (1655) Morris Daley	9-17-58	6-1-59	96,462.00	96,884.96	General
Twin Peaks Chain Link Security Fence, Auxiliary Reservoir (S.F. Fire Dept.) (1668) Wulfert Company, Inc.	10-8-58	1-13-59	2,356.00	2,356.00	General
Hassler Health Home (Int. & Ext. Paint.- Sewage Treatment Plant (1639) New Method Paint.& Dec. Co.	12-24-58	2-17-59	2,972.00	2,972.00	General
Central Fire Alarm Station - Acoust. Ceil., light. & related work (1694) Arthur W. Baum	1-16-59	5-1-59	7,400.00	7,400.00	General
California Palace of Legion of Honor, Esplanade Rprs.(1702) Arthur W. Baum	3-4-59	41%	29,300.00	11,607.00	General
Hassler Health Home - (Exterior Paint.) (1713) G. E. Young	3-6-59	5-21-59	2,272.00	2,272.00	General
Total Awarded and Expended During Fiscal Year			$1,270,842.00	$1,145,229.12	

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of the

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF SAN FRANCISCO

FISCAL YEAR ENDING JUNE 30, 1960

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ANNUAL REPORT
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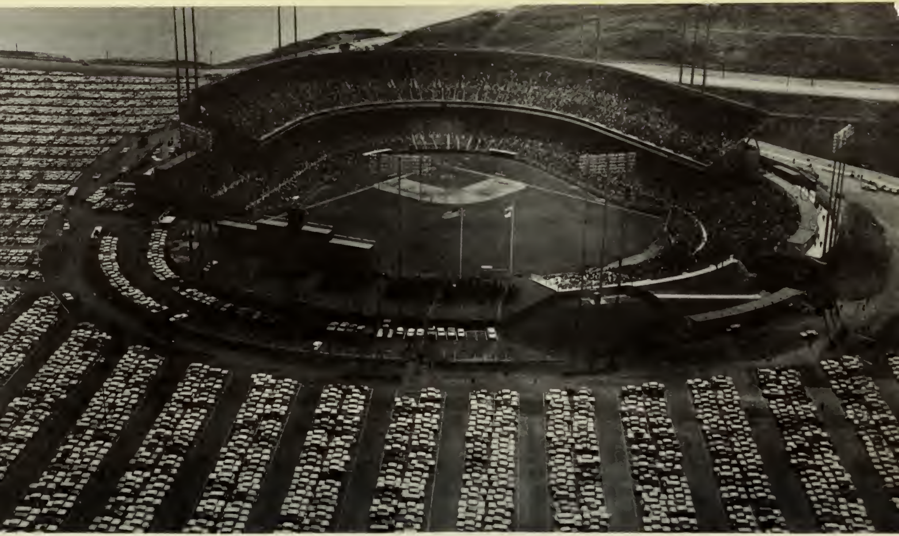
DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF SAN FRANCISCO

FISCAL YEAR ENDING JUNE 30, 1960

GEORGE CHRISTOPHER	Mayor
SHERMAN P. DUCKEL	Chief Administrative Officer
REUBEN H. OWENS	Director of Public Works

Material compiled by John A. Jelincich, Bureau of Engineering



April 12, 1960
Opening Day at Candlestick Park Stadium

PHOTO COURTESY OF SAN FRANCISCO EXAMINER

Table of Contents

DIRECTOR'S LETTER OF TRANSMITTAL 5

BUREAU OF ENGINEERING 7

General Review 7
Administration of Contracts 7
Division of Streets and Highways 9
Division of Design 22
Division of Traffic Engineering 47
Division of Surveys and Mapping 54
Division of Construction 60
Administration of Bureau 63

BUREAU OF ARCHITECTURE 66

BUREAU OF BUILDING INSPECTION 95

MAINTENANCE AND OPERATION 104

BUREAU OF SEWER REPAIR AND SEWAGE TREATMENT .. 106
BUREAU OF STREET REPAIR 125
BUREAU OF STREET CLEANING 138
BUREAU OF BUILDING REPAIR 149

ADMINISTRATIVE BUREAUS 157

BUREAU OF ACCOUNTS 157
CENTRAL PERMIT BUREAU 163

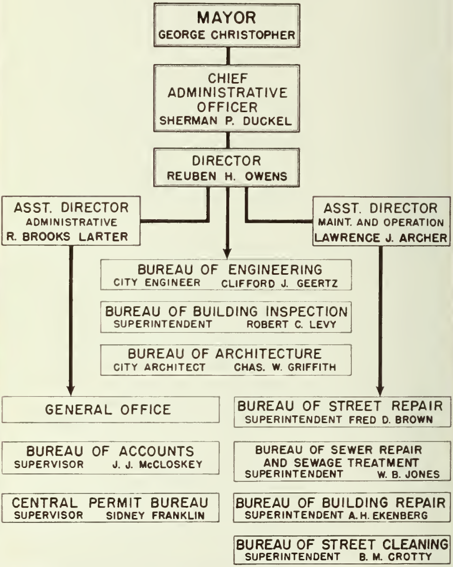
APPENDICES

I - Current Contract Date, Bureau of Engineering
II - Current Contract Data, Bureau of Architecture

ORGANIZATION CHART

DEPARTMENT OF PUBLIC WORKS

CITY AND COUNTY OF SAN FRANCISCO
JUNE 30, 1960


MAYOR
GEORGE CHRISTOPHER
CHIEF ADMINISTRATIVE OFFICER
SHERMAN P. DUCKEL
DIRECTOR
REUBEN H. OWENS
ASST. DIRECTOR
ADMINISTRATIVE
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ASST. DIRECTOR
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BUREAU OF ENGINEERING
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BUREAU OF BUILDING INSPECTION
SUPERINTENDENT ROBERT C. LEVY
BUREAU OF ARCHITECTURE
CITY ARCHITECT CHAS. W. GRIFFITH
GENERAL OFFICE
BUREAU OF ACCOUNTS
SUPERVISOR J. J. McCLOSKEY
CENTRAL PERMIT BUREAU
SUPERVISOR SIDNEY FRANKLIN
BUREAU OF STREET REPAIR
SUPERINTENDENT FRED D. BROWN
BUREAU OF SEWER REPAIR AND SEWAGE TREATMENT
SUPERINTENDENT W. B. JONES
BUREAU OF BUILDING REPAIR
SUPERINTENDENT A. H. EKENBERG
BUREAU OF STREET CLEANING
SUPERINTENDENT B. M. CROTTY

CITY AND COUNTY OF SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS

OFFICE OF THE
DIRECTOR OF PUBLIC WORKS

260 CITY HALL
SAN FRANCISCO 2,
CALIFORNIA

June 19, 1961

Annual Report
1959-1960

Mr. Sherman P. Duckel
Chief Administrative Officer
City and County of San Francisco

Dear Mr. Duckel:

In compliance with the provisions of Section 20 of the Charter of the City and County of San Francisco, I submit herewith the annual report of the Department of Public Works for the fiscal year ending on June 30, 1960.

For the fiscal year the Department awarded 238 contracts for the total bid amount of $14,954,619, a decrease of 2% in the number of contracts and a decrease of 43% in the value of contracts awarded in the preceding year, which however included the award of the $14 million Hall of Justice contract. Except for this unusually large contract in 1958-59 the value of the contracts awarded during 1959-1960 would have shown a 23% increase.

The Bureau of Building Inspection processed 11,294 permits for private construction projects estimated to cost $120,631,000. This was a decrease of 3% in number of permits but an increase of 30% in the value of work done. The value of over $120 million tops by $28 million the previous high which was established last year.

In December 1959, the first of two contracts was awarded for the Geary Expressway project which includes the widening and reconstruction of about 1.4 miles of Geary Boulevard between Franklin Street and Masonic Avenue. This first section includes an undercrossing, between Webster and Steiner Streets, which passes under Fillmore Street. The final contract was awarded on March 17, 1961.

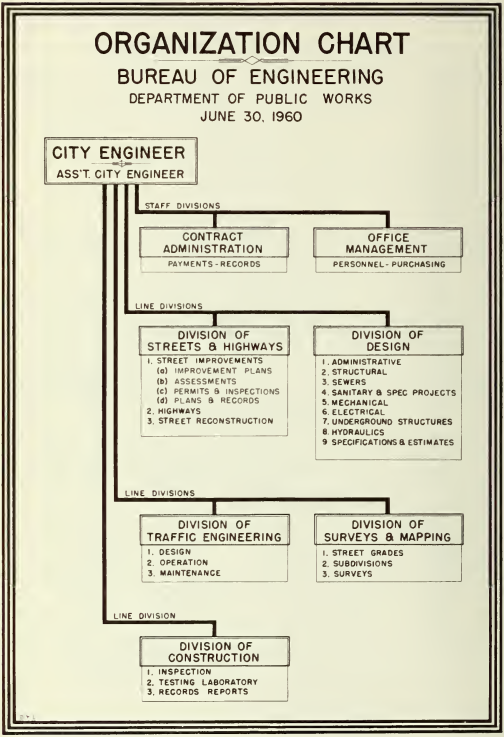
I take this opportunity to offer my sincere thanks to the Assistant Directors, the nine Bureau Heads, their staff and the personnel of the Department for jobs well done.

Your guidance and assistance in solving the many problems of this Department once again warrants my deep appreciation.

Very truly yours,

Reuben H. Owens

Reuben H. Owens
Director of Public Works



ORGANIZATION CHART

BUREAU OF ENGINEERING

DEPARTMENT OF PUBLIC WORKS
JUNE 30, 1960

BUREAU OF ENGINEERING

Clifford J. Geertz, City Engineer

GENERAL REVIEW OF THE YEAR'S WORK

The organization Chart on the opposite page indicates the general functions of the Bureau of Engineering. The wide variety of its activities have been described in previous reports.

In general the planning activities of the Bureau increased over those of the previous year while construction activity fell off somewhat. Plans and contracts awarded for work having an aggregate value of about $6.8 million, an increase of nearly 78 percent over last year despite the fact that the number of contracts awarded decreased from 123 to 113. Contract payments were approximately $4.8 million or about 20 percent below those of the previous year.

ADMINISTRATION OF CONTRACTS

Table I summarizes the contracts which were awarded or in progress during the fiscal year under plans and specifications prepared by the Bureau. This summary is supplemented by separate tables in Appendix I which list all the contracts for each of the various types of construction. Table I also indicates the estimated amount expended during the year on contracts under way, some of which had been awarded during the preceding year but not completed until the current year.

The figures for contracts awarded and amounts expended are shown graphically in Figure 1 for a ten year period.

TABLE I
BUREAU OF ENGINEERING CURRENT CONTRACT DATA SUMMARY SHOWING CONTRACT WORK AWARDED OR IN PROGRESS
July 1, 1959—June 30, 1960

Table	Type of Construction	No.	CONTRACTS AWARDED AGGREGATE VALUE	AMOUNT EXPENDED FISCAL YEAR 1959-60
A	Major Thoroughfares	4	$1,307,291.08	$1,031,785.46
B-1	Streets - Private Contracts	26	2,620,327.10	670,342.00
B-2	Streets - Assessment Proceedings	15	512,785.51	606,906.74
B-3	Streets - Public Contract City Pay	10	464,555.40	505,775.03
B-4	Streets - Car Track Removal	2	30,186.00	436,398.84
C	Traffic Signals and Channelization	7	201,956.05	195,548.40
D-1	Sewers - Pipe, Vitrified Clay and Concrete	5	678,195.55	182,108.02
D-2	Sewers - Concrete, Monolithic	3	356,969.97	519,166.17
E	Miscellaneous	41	634,338.99	677,286.81
	TOTALS	113	$6,806,605.65	$4,825,317.47

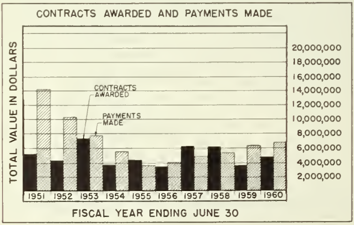


FIG. 1
CONTRACTS AWARDED AND PAYMENTS MADE

DIVISION OF STREETS AND HIGHWAYS

Highway Section

FUNCTION

Designing and planning freeways, major streets, and highway improvements, and developing specifications for the pavement part of projects. Preparing preliminary drawings and reports for public hearings in connection with future freeway and highway development. Maintains close liaison with the State Division of Highways relative to Freeway design of State projects within the City and County.

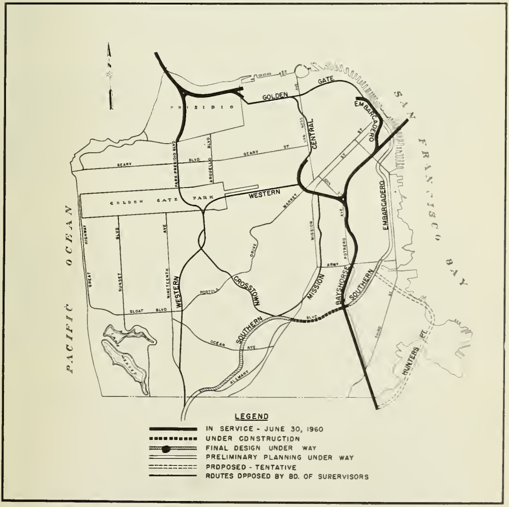


FIG. 2
PLAN OF FREEWAY SYSTEM

Freeway Program

Since the adoption of Resolution No. 45-59 by the Board of Supervisors at their meeting of January 26, 1959, declaring opposition to the construction of certain freeways along the routes as outlined in the 1951 Master Trafficways Plan (Amended May 1955), preliminary planning for freeways has been held in abeyance pending the re-evaluation of the Master Trafficways Plan.

The re-evaluation study, undertaken as a joint project by the Department of City Planning, will be completed in the latter part of 1960. The new study purports to develop a comprehensive freeway network for the City which will serve the anticipated traffic needs and also be acceptable to the general community. Although the planning of a rapid transit system for San Francisco has not yet been finalized, it is assumed that the new trafficways plan will be complemented by a definite mass rapid

On September 19, 1959, State Route 253 of the State Highway System came into being, accepting into its system those unopposed routes through industrial areas which were previously under City jurisdiction. As a consequence all future planning and construction of freeways in San Francisco will be done by the State Division of Highways. Close liaison, however, is still maintained by the engineering and planning staffs of the City with those of the State Division of Highways during all phases of freeway planning.

State Freeways

Currently, the State Division of Highways is proceeding with the construction of the Southern Freeway and with the planning of the Southern-Embarcadero Freeway. The Southern Freeway is that portion of Route 2 between its interchange with Route 68 (James Lick Memorial Freeway) and Orizaba Avenue; the Southern-Embarcadero Freeway is that section of Route 253 between its interchange with Route 68 and its junction with the Embarcadero Freeway at Howard Street.

Also in the planning stage is a portion of Route 225 between Alemany Boulevard and Orizaba Avenue, the completion of the Southern Freeway to the County Line.

Southern Freeway (Route 2)

Under the first of four contracts covering the construction of the Southern Freeway project, the construction of the Route 2/68 Interchange between the James Lick Memorial Freeway and the Southern Freeway has been completed and is open to traffic.

The second contract, covering the construction of the freeway between Milton Street and the Route 2/68 Interchange, has been advertised for bids which will be opened on August 24, 1960.

The remaining portion of the Southern Freeway is now being reviewed by the City.

Southern-Embarcadero Freeway (Route 253)

Studies are now under way for the location of a portion of Route 253 which is comprised of the easterly extension of the Southern Freeway from the James Lick Memorial Freeway and the southerly extension of the Embarcadero Freeway from Howard Street, both freeways connecting at Army Street. This freeway route is urgently needed as an alternate to the James Lick Memorial Freeway.

While this section of the Southern Freeway was under City jurisdiction, the firm of DeLeuw, Cather and Company, Consulting Engineers, was engaged to prepare its construction plans and specifications. These plans and specifications have been completed and were recently transmitted to the State Division of Highways for its information and utilization. The City Real Estate Department, under an agreement with the State, is completing the acquisition of properties required for the freeway right-of-way.

Southern Freeway (Route 225)

On April 27, 1960, the California Highway Commission passed resolutions adopting the route for a portion of Route 225 between Orizaba Avenue and Alemany Boulevard in San Mateo County and establishing a freeway thereon.

This freeway route, 5.25. miles in length, will replace existing routes which are badly congested during peak hours by inter-county traffic.

Hunters Point Freeway (Route 253)

Although the State Division of Highways is still in the very early stages of preliminary planning for the southeasterly segment of Route 253, the State Highway Commission has given this route freeway status rather than expressway designation. This route is essential as an alternate the the James Lick Memorial Freeway. It would also serve the expanding San Francisco Naval Shipyard, the recently constructed Candlestick Stadium and the existing and planned industrial developments in the southeast sector of the City.

Street and Highway Improvements

Major Thoroughfares

Geary Expressway

The first of two contracts to cover the widening and reconstruction of Geary Street between Franklin Street and Masonic Avenue was awarded on December 2, 1959. This initial phase of the Geary Expressway project involves the roadway reconstruction between Webster Street and Steiner Street with an undercrossing at Fillmore Street to reduce congestion and improve traffic safety.

Construction plans and specifications for the remainder of the roadway reconstruction are nearing completion and the second contract to cover the remainder of the project is scheduled to be advertised for bids the latter part of 1960.

The Geary Expressway project is an integral part of the Western Addition Redevelopment Program and, when completed, will provide a necessary traffic service on a six-lane divided roadway.

Brotherhood Way

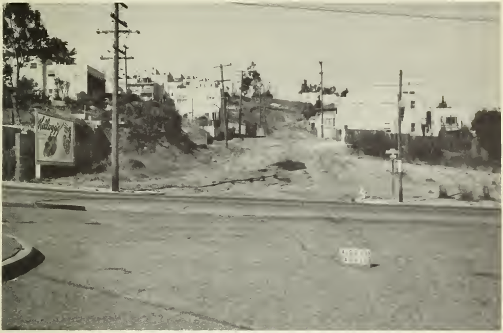
A contract for the improvement of Brotherhood Way was awarded on June 24, 1960, under which the roadway will be realigned and reconstructed from Lake Merced Boulevard to west of Junipero Serra Boulevard. The existing feature of a landscaped median strip will be retained. For public convenience and safety a pedestrian overcrossing will be constructed at Thomas More Way.

Secondary Thoroughfares

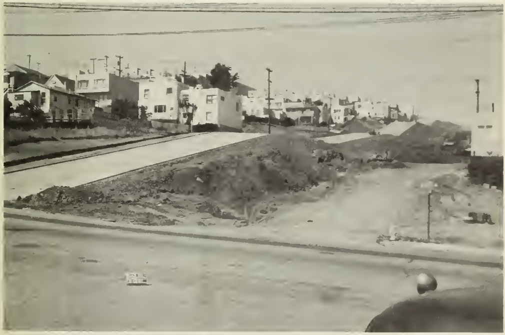
Mansell Street Widening

The contract for the widening and improvement of Mansell Street between San Bruno Avenue and University Street was awarded on October 9, 1959. Formerly unimproved, the street when completed will accommodate two traffic lanes in each direction with a wide landscaped median strip. A small portion of the work is being financed by owners of abutting property by assessment procedure.

This project will complete a section of a route designated as the McLaren Parkway in the Transportation Section of the Master Plan.



MANSELL STREET WIDENING
Before Construction



MANSELL STREET WIDENING
During Construction

Plans for Future Work

Webster Street Widening

As an essential part of the Western Addition redevelopment program, this project calls for the widening of Webster Street between Post Street and Golden Gate Avenue to a four-lane divided roadway. The construction plans and specifications are completed and the contract will be advertised for bids by the end of 1960.

McLaren Park Roads

Conducted in coordination with the McLaren Park development plans of the Recreation and Park Department, the design of the McLaren Park Roads is contemplated in two units.

As a section of the McLaren Parkway as outlined in the Transportation Section of the Master Plan, the first unit extends from Mansell Street at University Street to Persia Avenue and Brazil Avenue at La Grande Avenue. This will be a four-lane divided roadway with a landscaped median strip. Construction is scheduled for the latter part of 1960.

A two-lane undivided roadway has been selected for the second unit which will traverse the south slope of McLaren Park from Visitacion Avenue at Hahn Street to McLaren Parkway just west of University Street. This roadway is another park road to be constructed from the Special Road Improvement fund under an agreement with the Recreation and Park Department.

Geneva Avenue Widening

Plans are being developed to widen the entire length of Geneva Avenue west of Alemany Boulevard, and including an extension of the proposed four-lane divided roadway to connect with Ocean Avenue in the vicinity of Phelan Avenue.

Great Highway Extension

The Master Plan for the San Francisco Zoological Gardens as proposed by the Recreation and Park Department entails the abandonment of a portion of Lake Merced Boulevard.

As a replacement for the abandoned roadway, a traffic facility similar in physical features to the Great Highway has been selected to skirt the enlarged Zoological Gardens, forming a link between the Great Highway at Sloat Boulevard and Skyline Boulevard in the vicinity of Lake Merced Boulevard.

Preliminary planning is under way for the new route located in the final design.

Washington and Clay Streets Widening

By its nature a trafficways network should be an integral and essential element in any plan for urban redevelopment. Of no less importance are Washington and Clay Streets which thread through the heart of the Golden Gateway, a project of the Redevelopment Agency to rebuild the existing wholesale produce market area into a modern community.

The two streets are proposed to be widened between Sansome Street and Davis Street, connecting to a pair of ramps from the Embarcadero Freeway. This will provide a much needed traffic service to both the Golden Gateway and the adjacent financial district. The design of this project is being withheld pending approval of the ramp connections by the Board of Supervisors.

Drumm Street Park

The reconstruction and landscaping of the traffic island at Californis and Drumm Streets will be done in accordance with the plans prepared by the firm of Osmundson and Staley, Consulting Landscape Architects.

This is a cooperative project between the City and the San Francisco Downtown Market Street Improvement Association which has furnished a portion of the construction cost. Construction is scheduled for the latter part of 1960.

New Hall of Justice General Parking Area

The new Hall of Justice, now under construction at Seventh and Bryant Streets, will be provided with a landscaped parking area located under the adjacent James Lick Skyway. The parking area will have its entrance on Harrison Street and its exit at the east end of the area at Harriet Street. Approximately 276 stalls will be available for self-parking patrons.

Construction plans and specifications are being completed to meet the scheduled date for commencement of the work in February, 1961.

Street Improvement Section

FUNCTIONS

Preparing plans, specifications, and line and grade diagrams, for streets to be constructed under private contract as under special assessment proceedings, and maintaining records of original paving projects. Inspection of pavements and sidewalks to discover failures or misuse, reviewing applications for permits for special street use, making investigations and inspections in connection with encroachments, street use permits and excavation permits, enforcing the repair of defective sidewalks, and investigating claims of any type made against the department.

Coordinates special assessment procedures, preparing special assessment documents, spreading assessments, and generally supervising assessment proceedings.

Street Improvements Financed by Property Owners

All street construction which was financed in whole or in part by the owners of fronting property and for which permits were granted or public contracts awarded during the 1959-60 fiscal year together with those authorized but not completed in the previous fiscal year, are listed in detail in Appendix 1, Tables B-1 and B-2.

Private Contracts

Table B-1 lists the street improvements which were constructed under private contracts negotiated directly between the property owners and contractors of their own choice. The City's only function in private contract work is to grant the permit, furnish the plans and specifications, and inspect the work during construction. Twenty-six permits for private contracts aggregating $670,342 were issued during the year.

Assessment Contracts

Table B-2 lists similar street projects which were done under public contract awarded by the City, the cost being assessed in whole or in part against the property owners benefited by the work. This procedure is in accordance with (the Street Improvement Ordinance of 1934) which provides for preparation of plans and specifications, notification of property owners, public hearings, awarding of contract, supervision of construction, and final levy of assessment on the property. In many cases, City Aid is extended in order to reduce individual assessments to the legal limit which is defined as two and one-half times the lot valuation. The City also contributes funds according to established rules in order to prevent excessive assessments on residential corners, irregular lots and property having disproportionalely long frontage. (Although only a little more than half as many assessment contracts were awarded than last year, the total value of the contracts was almost doubled.)

Table 2 indicates the volume of work carried on during the year in connection with assessment proceedings for street improvements.

TABLE II
STREET IMPROVEMENT ASSESSMENTS
ASSESSMENTS AND BONDS FOR STREET WORK PERFORMED UNDER ARTICLE 6, CHAPTER X, PART II, OF THE PUBLIC WORKS CODE

Assessments issued for cost of street work	11
Cost of street improvements covered by assessments issued	$322,521.28
Receipts for bond payments issued	132
Amount of bond payments collected	$16,801.68

STREET WORK PROCEEDINGS INSTITUTED UNDER THE STREET IMPROVEMENT ORDINANCE OF 1934 ARTICLE 6, CHAPTER X, PART II, OF THE PUBLIC WORKS CODE

Resolutions of Intention passed	21
Street Improvement Projects recommended to the Board of Supervisors	18
Notices of Street Improvement posted	163
Notices of Resolution of Intention mailed	249
Ordinances ordering performance of street improvements passed	17
Proposals for street improvements published	16
Awards of Contract for street improvements	15
Notices of Recordation posted	223
Notices of Recordation mailed	251
Private Contracts granted	27
Estimated Cost of Private Contracts granted	$213,230

RELEASED BY

Street and Sidewalk Inspection

Under the direction of an Assistant Engineer, a Junior Engineer and six Inspectors of Public Works Construction were employed to supervise street excavations and blasting operations, inspect the use and condition of streets and sidewalks, investigate and report on claims for liability on the part of the City and County, and to post notices of improvement and assessment.

Special street and sidewalk inspections were conducted in conjunction with various track removal, pavement reconstruction, and street resurfacing projects to call to the attention of property owners of their obligation and responsibility for improving, repairing, and maintaining the sidewalks fronting their respective properties. The cooperation of the property owners, combined with the coordination of roadway and sidewalk pavement work, provides a completely renovated street between property lines and helps neighborhood improvement.

A contract was prepared and awarded to a local contractor to pave, with concrete, the unimproved sidewalk areas fronting various properties throughout the City where the owners, after proper notice, had failed to do so. Approximately 20,000 square feet of sidewalk were constructed under the contract.

Inspections were conducted throughout the City. Existing sidewalks which were found defective and contained irregularities were ordered repaired in compliance with Defective Sidewalk Repair Ordinance No. 9046. This Ordinance provides that the Department of Public Works shall repair defective sidewalks in cases where the owner, upon notification, fails or neglects to make such repairs. City forces repaired or reconstructed approximately 750 square feet of sidewalk under this Ordinance. Financing of the work was provided through the Delinquent Sidewalk Repair Revolving Fund. The cost of the work is an obligation of the adjacent property owner. If the owner of the property does not reimburse the City for the work a lien is placed on the property.

Inspection services were provided for blasing operations at Bayview Park, Candlestick Park, fill and cover for the Sanitary Fill Co. and other projects including Diamond Heights Redevelopment.

House moving operations, which have increased considerably during recent freeway construction, were kept under close observation. City streets which were used for this purpose were inspected. Regulations pertaining to the moving including traffic controls and use of the street, were enforced.

Excavating, backfilling, and repaving by various utility companies were inspected and supervised, building plans were reviewed, and permit applications for driveways and tanks in the sidewalk area were approved and the locations also inspected. Sidewalk tree box permit applications were investigated and processed.

Other services performed by personnel of this unit involved regulation of the temporary occupancy of street space during construction operations, the inspection and regulation of sidewalk flower markets, investigations of claims and complaints, and preparation of Public Works Orders permitting the installation of decorations, such as flags, banners and posters for events of public interest.

The following summary illustrates the activities, functions, and services rendered by the personnel of this unit:

INSPECTIONS, NOTICES, PERMITS, AND INVESTIGATIONS

Curb lowering permits and inspections	1,203
Ownership addresses researched	2,000
Preliminary sidewalk repair notices served	14,822
Formal notices to construct or repair sidewalks	582
Notices to remove obstructions, oil, etc.	990
Notices to replace side sewer covers	1,274
Street Space permits and inspections	5,631
Sidewalk tank excavation permits and inspections	250
House moving permits and inspections	62
Defects in pavements reported (written)	1,628
Damaged signs reported	360
Excavation permits approved	30,964
Excavation repaving inspected	3,824
Posting Notices of Improvements	524
State Encroachment Permits obtained	17
Asphalt samples for analysis	7
Claims investigations and inspections	550
Special investigations and permits (Blasting, etc.)	5,216
Correspondence answered	457
Personal and telephone calls of complaints or for information	15,000
Building permit driveway plans, checked	1,937
Notices of Street Construction	4,838
Number of Sidewalk frontages inspected	30,407
New Sidewalk installed after notice (Sq. ft.)	20,000

DAMAGE CLAIMS

Investigations and reports were made at the request of the City Attorney's Office covering 234 damage claims filed against the City and County of San Francisco involving the Department of Public Works dur-Works during the fiscal year 1959-1960.

Claims which were investigated were for damages which allegedly occurred as a result of Contractors Operations, Utility Company Operations, Sidewalk Conditions, Roadway Conditions, Automobile Collisions, etc.

Street Reconstruction Section

FUNCTIONS

Preparing plans and specifications for projects that involve the removal of abandoned streetcar tracks and the reconstruction or resurfacing of the pavements. Preparing plans for street maintenance projects and sidewalk improvements.

Eleven contracts, aggregating $511,134, were awarded for construction, reconstruction, and maintenance on 16.78 miles of city streets. Three contracts totaling $303,818 were for resurfacing and three, slurry seal, totaling $91,622, were for construction, reconstruction, and curb raising on steep hills; five, totaling $115,694, were in conjunction with Candlestick Park Stadium Access Road System.

The first contract for $7,476 was for the construction of a slurry seal coat. The type of pavement that slurry seal coat is applied to is in sound condition; however, because of its rough texture, pedestrians find it hard to walk on and its appearance is unattractive. The slurry seal coat is expected to smooth the roughness and give it a good appearance at a much lower cost than other methods available.

Track Removal

The removal of the track on downtown Geary Street and along the route of the "B" line in the outer Richmond District as described in last year's report was completed. The contracts for removal of track on Seventeenth Street and on Mariposa Street, between Potrero Avenue and on Balboa Street between Twenty-ninth Avenue and Thirty-first Avenue, totaling $28,463 and covering 0.11 mile of double track, were awarded and completed. The track removal program has, to date, accounted for the removal of tracks from 112.17 miles of city streets; 2.20 miles of abandoned track still remain to be removed. Figure 3 shows the status the status of the track removal program as of June 30, 1960.

GEARY STREET "B" LINE TRACK REMOVAL
Looking West from 33rd Ave. and Balboa Street

List of Accepted Streets

A list of accepted city streets has been compiled in such form that interested parties will be able to determine readily if a street has been officially accepted by the Board of Supervisors. The tabulation includes blocks and intersections accepted, ordinance number, year accepted, and special remarks.

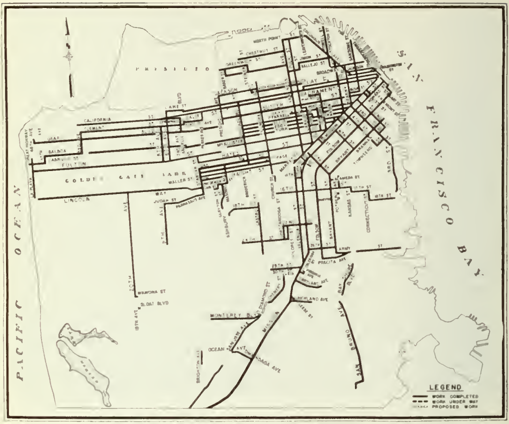


FIG. 3
TRACK REMOVAL PROGRAM

DIVISION OF DESIGN

The Division of Design is responsible for designing and preparing plans and specifications for sewers, sewage treatment facilities, structures other than streets and highways, landslide correction, high pressure water system, landscaping projects, street lighting, electrical and mechanical work on public buildings and street work.

In addition, problems relating to the disposal of garbage are investigated.

SEWERAGE SYSTEM

General

The extension, reconstruction, improvement and increase in capacity of the sewerage and drainage system continued to progress principally being financed by recent sewer bond issues. Included in this work were the planning, design and preparation of contract plans and specifications for new storm, sanitary and collecting sewers, sewer structures and sewage pumping stations, for replacement of existing inadequate sewerage facilities and for improvement and modernization of the three sewage treatment plants.

Plans and specifications prepared by other governmental and private agencies for new subdivisions, redevelopment areas, freeways, public garages, and civic improvements which required the approval of the Bureau were reviewed regarding compliance with regulations and acceptable design procedures. Major examples of such were Southern Hills No. 1 and Crocker-Amazon No. 3 subdivisions, the Southern Freeway, Diamond Heights Redevelopment Area, State College Garage and Civic Center Plaza.

Assistance was given to the Bay Area Rapid Transit District as to methods and costs of relocations of sewers in relation to the District's preliminary studies for that portion of the rapid transit system in San Francisco.

Investigation of sewers and drainage in relation to flooding complaints, street closing, easements and new spur tracks continued.

Measures were taken to initiate agreements with the Bayshore Sanitation District whereby the City would handle and treat sewage originating in San Mateo County and whereby a mutually agreeable method of payment would be set forth.

During the year several new materials and products were used in sewer construction. The most notable of these are listed hereinbelow:

(a) A catchbasin grating with bars parallel to the curb.
(b) Type II sulphate-resisting cement in monolithic concrete sewers. (Now adopted as a standard.)
(c) Fiberglass band sleeves for reinforced concrete pipe joints.
(d) Vibro-cast reinforced concrete pipe with flush type bell and spigot joints in pipes over 72 inches in diameter.
(e) Elliptically-shaped reinforced concrete pipe.

The standardization and use of plastic joints for vitrified clap pipe continued with apparent satisfactory results. Comments from the field were favorable.

Funds

The major sewer contracts awarded during the fiscal year, including collecting sewers and sewers constructed under major street reconstruction contracts, exclusive of assessment projects, were as follows:

Sewer Extensions and Replacements	$ 570,000
Sewers in Contracts for Street Reconstruction and Widening, Track Removal and Civic Improvements	54,400
Collecting Sewers and Pumping Stations	570,100
Total	$1,194,500

Bond Issue Balances

The balances in the currently active sewer bond accounts at the close of the fiscal year were as follows:

	Bond Issue Total	Approximate Balance
1944 Sewer Bonds	$12,000,000	$ 703,000
1948 Sewage Treatment Bonds	15,000,000	104,000
1954 Sewer Bonds	12,645,000	5,890,000
Total		$6,697,000

The total balance is committed to sewer projects scheduled to be constructed within the next 18 months. These projects will intercept, collect and divert to treatment plants all sewage now discharging into the Bay; will extend the Southeast Sewage Plant effluent line to the Bay, and will extend and enlarge existing sewers relative to redevelopment projects.

Proposed 1960 Sewer Bond Issue

In order that funds will be available for necessary improvements and additions of the sewer system and treatment plants when present funds are exhausted, it has been decided to propose a Sewer Bond Issue to the Board of Supervisors for submittal to the electorate at the election in November of the forthcoming fiscalyear.

Various sewer projects are urgently needed to extend, enlarge or replace sewers, to collect and divert sewage to treatment plants and pumping stations were investigated as to need and urgency.

Sewer projects totaling 55 in number and estimated to cost $41,000,000 were studied and will be submitted to the Supervisors with the recommendation that 25 of these projects be financed by the issuance of bonds at a cost of $19,700,000.

Sewerage System Projects

During the fiscal year a number of projects were undertaken to expand the sewerage system, to replace existing inadequate sewers and sewers in poor condition, to repair existing sewers by guniting, and to relocate or improve the sewer system in connection with street widenings and improvements.

Some of the more notable projects are described hereinbelow.

Geneva Avenue Auxiliary Sewer

An auxiliary sewer was constructed in Geneva Avenue between Carter and Carrizal Streets in order to relieve the existing inadequate sewer and eliminate flooding in Geneva Avenue, as evidenced by complaints of residents. The new sewer, 1,030 feet in length, included 3'0" x 4'6" monolithic concrete sewer, 33 inch and 30 inch diameter spun reinforced concrete pipe, and 12 inch to 21 inch diameter vitrified clay pipe. The contract cost was $37,440.

30th Street Sewer

In order to relieve flooding in the vicinity of 30th and Chenery Streets as evidenced by letters of complaint, a contract was awarded and completed in the amount of $48,430 for construction of a sewer in 30th Street from Chenery Street to San Jose Avenue. The new sewer consisted of 700 feet of centrifugally spun reinforced concrete pipe ranging in size from 33 inch to 39 inch diameter. In order to connect this sewer to an existing sewer tunnel in San Jose Avenue it was necessary to construct a special deep drop manhole, 6'6" in diameter and 37 feet in depth directly over the tunnel. The 6'6" diameter manhole shaft was constructed of sections of pre-cast reinforced concrete pipe. Special staggered ladders and landing platforms were incorporated to permit safe access to the bottom of the manhole.

Sewer Construction Related to Geary Expressway Underpass at Fillmore Street

The construction of an underpass for the Geary Expressway at Fillmore Street and the concurrent widening of Geary Street between Webster and Steiner Street necessitated the re-routing of the Fillmore Street Sewer and the construction of service sewers in the widened portions of Geary Street.

The re-routing of the Fillmore Street Sewer was accomplished by constructing the sewer to form an 860 foot loop around the underpass. The sewer was constructed of 6'4" x 4'0" elliptical reinforced concrete pipe with monolithic concrete curves all with the major axis laid flatwise in order to obtain cover and provide clearance for other utility pipes. This was the first instance of the City's use of elliptical pipe for sewers.

As a link for a future auxiliary sewer in Steiner Street, 170 linear feet of 54 inch diameter reinforced concrete with fiberglass joint bands were constructed in the intersection of Geary Street. This was the first use of fiberglass bands for sewers.

Service sewers consisting of 1,250 feet of 12 inch V.C.P. were installed in the widened portion of Geary Street. The sewer work, now approximately 25 percent complete at the end of the fiscal year, was included in a contract for the Underpass and street widening work and, at contract prices, will cost $105,000.

Construction and Laying of Elliptical Sewer Pipe
for Geary Expressway near Fillmore Street Underpass

Lincoln Way Sewer Section "C"

A contract was awarded for $324,700 for the construction of a sewer in the north side of Lincoln Way between 20th and 29th Avenues, consisting of 1,670 feet of 87 inch diameter and 950 feet of 75 inch diameter bell and spigot vibro-cast reinforced concrete pipe, and 60 feet of 30 inch diameter bell and spigot centrifugally spun reinforced concrete pipe. The contract work was 3 percent complete at the end of the fiscal year.

This sewer is an auxiliary designed to relieve flooding caused by the inadequacy of the existing sewer and is an extension of the previously constructed auxiliary sewer in Lincoln Way west of 29th Avenue.

Griffith Street Sewer

A contract was completed for construction of a sewer in Griffith

Street from Navy Road to Oakdale Avenue at a cost of $4,700, involving 320 feet of 12 inch and 15 inch diameter vitrified clay pipe. This sewer, an extension of the system, will serve an adjacent housing project.

North Point Collecting Sewers, Section D-2

A contract was awarded near the close of the fiscal year for the construction of Section D-2 of the North Point Collecting Sewers, consisting of 3,612 linear feet of 30 inch diameter concrete cylinder pipe sewer, all in 4th Street from Howard Street to the Fourth Street Pumping Station near the Channel.

The force main and sewer will carry the sewage pumped from the Fourth Street Pumping Station to the North Point Main Sewer in Howard Street, from where it will flow by gravity to the North Point Sewage Treatment Plant.

A total of 26 railroad tracks owned by the Southern Pacific Company across the trench area, necessitating certain construction restrictions to keep main tracks in operation and construction special structural protection of the force main from heavy train loads.

Prior to award of the contract, an agreement with the Southern Pacific Company was executed for payment to the City for the additional expenses for the inconvenience of maintaining railroad service during actual work in the tract area and for construction of special structural protection in the form of corrugated metal pipe encasement.

Contract cost was $260,997 and it is estimated that the Southern Pacific Company's share of the cost based on unit bid items in the contract will be $20,844.50

North Point Collecting Sewers, Section D-4

A contract was awarded at the close of the fiscal year for the construction of Section D-4 of the North Point Collecting Sewers, consisting of 2,330 linear feet of 2'6" x 3'9" egg-shaped, reinforced concrete sewer on piles, all located in Berry Street between 4th and 7th Streets.

This sewer will collect sewage from sewers in 5th, 6th and 7th Streets and will carry the sewage to the Fourth Street Pumping Station. Contract cost was $309,129.

Guniting of Brick Sewers

The program of repairing existing brick sewers continued with the awarding of two contracts for construction of 3/4-inch gunite linings in existing 3' x 5' brick sewers as follows:

The Geary Boulevard sewer from Broderick to Steiner Street, a length of 1,930 linear feet with an interior area of 24,750 square feet, was gunited at a contract cost of $27,470 based on a unit bid price of $1.11 per square foot.

The 29th Street Sewer from Sanchez Street to a point west of San Jose Avenue, involving a length of 1,615 linear feet and an inside area of 20,600 square feet, is to be gunited under a contract awarded in June, 1960 at a cost of $20,390 based on a unit bid price of $0.99 per square foot. It is expected the work will be completed early in the forthcoming fiscal year.

Sewers in Street Projects

Sewerage and drainage work, at the costs indicated, were incorporated in several street widening, street reconstruction, and track removal project contracts, the most notable of which are:

Lincoln Way and Kezar Drive Channelization	$ 1,000
Twin Peaks Boulevard, Clarendon Avenue to Clayton Street	1,040
Mansell Street Widening, San Bruno Avenue to University Street	43,800
Laguna Street Reconstruction, Ellis Street to Eddy Street	5,860
17th Street Track Removal, Hampshire Street to Potrero Avenue	1,770
Sacramento Street, Reconstruction, Grant Avenue to Taylor Street	980

Sewer System Planning

GENERAL

Advance planning, designing and the preparing of contract plans and specifications for major projects for further expansion and improvement of the City's sewerage and drainage system continued throughout the fiscal year. Descriptions of the most notable of the projects in various stages of planning follow:

Division Street Auxiliary Sewer, Section "A"

Plans for this 8'3" x 9'6" monolithic reinforced concrete sewer have been completed, and pile requirements are being investigated. Agreements are being made with the Southern Pacific and the Western Pacific Railroad Companies whereby the City will be reimbursed for the cost of additional sewer barrel strength and additional piles required at track crossings in order to sustain the added loads due to trains.

Jackson Street Track Removal: Sewers

Plans have been completed for the sewer work to be done in conjunction with the track removal work in Jackson Street between Hyde and Steiner Streets, the work consisting of abandonment of old 3' x 5" brick wings and replacement of two blocks of sewers found to be inadequate and in poor condition.

Vicente Street Auxiliary Sewer

Plans were completed for an auxiliary sewer to relieve flooding in Vicente Street between 32nd and 33rd Avenues and contract bids will taken this fall.

Franklin and Bay Streets Sewer

Hydraulic studies and plans are nearly completed for a sewer in Franklin and Bay Streets to relieve flooding in the vicinity of Franklin and Union Streets as evidenced by many complaints. It is anticipated that contract bids will be taken late this year.

Alemany Boulevard Sewer

Plans for the relocation of the Alemany Boulevard Sewer east of Mission Street, to be constructed by the State in conjunction with the Southern Freeway work, were completed and sent to the State. The new sewer, designed for the ultimate required capacity, will consist of a double-barrel rectangular reinforced concrete sewer, each barrel being 6'0" wide by 10 feet 6 inches high. Inasmuch as the new sewer is of greater capacity than the existing sewer, the City will, by agreement, reimburse the State for the additional capacity installed under the State's contract. The total cost of sewer work is estimated to be $500,000.

Sewer Construction to be Done in Conjunction With Street Widenings and Extensions

Plans are being prepared for the required sewer work in connection with the widening of Webster Street between Post and O'Farrell Streets, and the construction of roads in McLaren Park.

North Point Collecting System

Progress continued on the design of the North Point Collecting System under the program for the cleaning up of the San Francisco Bay waters in conformity with the requirements of the State of California Water Pollution Control Board, although some phases of the work were again delayed due to difficulties in acquiring property.

The work on the plans and specifications for Section B-3 of the North Point Collecting Sewers was resumed, as a result of a resolution passed by the Board of Supervisors which will allow the acquisition of the necessary properties but with possession to be delayed until May, 1961.

Section B-3 which will be done under several contracts as follows:

(1) A Sewage Pumping Station at the intersection of Drumm and Washington Streets;
(2) 545 linear feet of 24-inch diameter encased sewer on piles in Drumm Street;
(3) 490 linear feet of 2'6" x 3'9" egg-shaped reinforced concrete sewer on piles in Washington Street:
(4) Modification of the Jackson Street Diversion Structure; and

(5) A 20-inch diameter concrete pipe force main in Washington Street.

This aforementioned construction will divert the existing flow in the Jackson and Howard Streets sewers to the proposed pumping station from which the sewage will be pumped to the existing Sansome Street sewer and then flow by gravity to the North Point Sewage Treatment Plant.

These new facilities will serve an area of 284 acres of which 88 acres are now served by the Commercial Street Pumping Station which was constructed in 1918 and is now obsolete.

The estimated cost for Section B-3 is $840,000.

Planning for Section D-3 of the North Point Collecting Sewers was again resumed after delays encountered due to certain land exchange between the State of California and the Southern Pacific Company. This project will include the construction of the largest diversion structure in San Francisco which will divert sewage from the 4-compartment Division Street Sewer at 7th and Channel Streets to an intercepting sewer under construction in Berry Street.

The estimated cost of the work has been reduced from previous estimates due to tentative agreement with the Southern Pacific Company regarding location, extent of train loading and the granting of certain easements without cost. The estimated contract cost is $500,000.

Plans and specifications were partically completed for Sections D-6 and D-7 of the North Point Collecting Sewers which will provide for the construction of diversion structures and intercepting sewers in 5th and 6th Streets respectively, which, with Section D-3, will provide for the diversion of approximately 85 percent of the raw sewage now discharging into the Channel.

The estimated contract cost of this project is $140,000.

An interim measure to abate the odor nuisance caused by sewage discharging into the Channel by spraying the Channel with an odor-masking compound was instituted this year because of the number of complaints received, particularly during the hot weather. A supplemental appropriation of $1,500 was voted by the Board of Supervisors to provide for odor control during times of more severe odor nuisance.

The major portion of the work of preparing contract plans and specifications was completed for Section D-8 of the North Point Collecting Sewers, which will include the construction of a diversion structure in the 3rd Street Sewer at Berry Street, and 1,000 linear feet of 2'6" x 3'9" egg-shaped reinforced concrete sewer on piles in Berry Street which will intercept and convey sewage to the Fourth Street Pumping Station.

The project is estimated to cost $210,000.

Outfall Studies

Intensive preliminary studies were made of the Bay waters for for proposed sludge outfall and effluent outfall extension from the Southeast Sewage and Sludge Treatment Plants. The outfalls are one of the alternative methods studied to meet the requirements of the State of California Water Pollution Control Board.

Landslide Correction

GENERAL

Principally because of a sub-normal quantity of rainfall there were no new slides reported during the fiscal year and existing slides under observation showed little or no movement. The rainfall for San Francisco from July 1, 1959 to June 30, 1960 totaled 15.45 inches, which is about 73.5 percent of the annual average.

As in the past, the Bureau of Sewer Repair made weekly measurements of the flows from drains constructed in the slide areas and the information obtained was analyzed to determine the effectiveness of the drainage systems and the need for additional facilities. Surveys were made periodically at many of the slide areas to check their stability.

Comments on the slides which received attention during the fiscal year are as follows:

Parker Avenue Slide

A contract was awarded in August of 1959 and completed in December 1959 for the southerly extension of the existing Parker Avenue Slide drainage system. The work included drilling three additional vertical drainage shafts down to the crown of the existing drainage tunnel in Parker Avenue and constructing ten vertical rock-filled drain shafts spaced at 10'0" centers.

Contract cost for the project was $23,267.78.

Ingerson Avenue Slide

Early in the fiscal year the viaduct which bridges the Ingerson Avenue slide area was completed and since then no significant movement or subsidence of the slide areas has been noted.

Readings from the 12 Carlson strainmeters installed in the piles under the viaduct have indicated an increase in stress of from 600 to 800 lbs. per square inch in the reinforcing steel. This increase probably indicates that the structure is undergoing a slight adjustment relative to the ground due to the heavy traffic going over the viaduct.

Movement and subsidence surveys and strainmeter readings will continue to be taken monthly.

El Camino del Mar Slide

At the end of the fiscal year the final design for the bridge superstructure to span the east slide area was about 50 percent completed and action had been initiated to obtain the required easements for the construction work from the Veterans' Administration and the Department of the Army.

Movement and subsidence surveys have continued on a bi-monthly basis and have shown that the rate of movement has decreased appreciably. The maximum total movement recorded over the past year in the east slide amounted to 9.75 inches northerly and 6 inches westerly, and for the west slide, 3 inches northerly and 2.25 inches westerly.

Miscellaneous Stabilized Slide Areas

Miscellaneous slide areas cited in previous annual reports and now believed to be stabilized include the Farmers' Market southwesterly slope, Forester Street, Twin Peaks Boulevard, Bache Street, Union Street at Sansome Street, 24th Street at Grand View Avenue.

Candlestick Park Access Roads Settlement Survey

As part of the long-range plan to obtain data on the settlement of the network of access roads into Candlestick Park survey reference points were set during construction and after final paving of the roadway. Continuous monthly and bi-monthly surveys on the vertical and horizontal movements of these reference points have yielded valuable information on the stability and rate of settlement of the road beds which are of compacted fill constructed on various depths of bay mud. These data are required for determining when repaving of these roads may become necessary. As may be expected, the rate of settlement varies in direct proportion to the depth of bay mud under the roadway.

Hunters Point Expressway has the greatest settlement so far, the depth of mud thereunder being 60 to 80 feet thick. It is anticipated, based on previous estimates and experience, that ultimate settlement of the Hunters Point Expressway may be in the order of 6 to 7 feet over a 20-year period with approximately half of this, or about 3 feet, occuring during the first five years.

The following are the average settlements recorded as of June 30, 1960:

Name of Street	DATE OF ORIGINAL SURVEY TAKEN AFTER COMPLETION OF FINAL PAVING	AVERAGE TOTAL SETTLEMENT RECORDED FROM DATE OF ORIGINAL SURVEY TO JUNE 30, 1960
Fitch: Carroll to Gilman	September 1959	0.02 ft.
Gilman: Fitch to Hunters Pt. Expressway	September 1959	0.22 ft.
Hunters Point Expressway: Gilman to Jamestown	August 1959	0.56 ft.
Jamestown Extension: Harney Way to Hunters Point Expressway	October 1959	0.38 ft.
Harney Way: Jamestown to McKinley Avenue	November 1959	0.03 ft.
Harney Way: McKinley Avenue to Bayshore	December 1959	0.22 ft.

Auxiliary Water Supply System

Investigations were made at approximately 100 locations to determine if facilities of the Auxiliary Water Supply System which serve as the high pressure fire protection system were in conflict with City, State or private utility company improvement projects.

Where it was determined to be best in the public interest that the Auxiliary Water Supply System facilities be relocated because of physical interference, the necessary plans and specifications were prepared. Whenever possible the work of the relocation was incorporated into the particular contract for the major improvement. The most notable relocation was made in conjunction with the Geary Street Underpass, the cost of such relocation amounting to $82,034.

The cost of the aforementioned investigations and preparation of plans and specifications was estimated at $16,000.

Contract plans for the construction of a high pressure supply line in Grove Street from Larkin Street to Van Ness Avenue were completed and bids were received at the close of the fiscal year. This line is part of the high pressure fire protection system extension which is planned to serve the entire Civic Center.

Contract cost was $18,000.

Preliminary plans for the construction of a high pressure supply line in Filbert Street (Contract I) on the north side of Telegraph Hill were completed. This area is one of the most scenic and colorful locations in San Francisco. Due to the steepness of the area it is inaccessible to conventional fire fighting equipment. Installation of this high pressure line should compensate for this deficiency.

Public Building Contracts

Candlestick Park Traffic Control Tower

Construction of a traffic control tower to provide a central control station for the Police Department to observe and direct traffic at Candlestick Park Baseball Stadium was 33 percent complete at the close of the fiscal year. The tower will be provided with communication facilities to direct personnel to the areas needing traffic control.

The contract cost was $23,028.

Storage Building and Facilities at the Department of Public Works Maintenance Yard

A reinforced concrete storage building having a floor area of 850 square feet was constructed, and sand storage facilities were improved at the Department of Public Works Maintenance Yard.

The contract cost was $21,159.05.

Farmers Market Paving

The paving of Farmers Market parking lot was completed during the fiscal year at a cost of $5,757.84.

Bayview Park Fencing

Protective fencing located at the top of Jamestown Avenue cut was completed during the fiscal year at a contract cost of $5,677.17.

Steinhart Aquarium Salt Water Supply Investigation

The matter of providing an adequate salt water supply for the Steinhart Acquarium has been under investigation by the Bureau of Engineering since early 1959 as a result of the Ocean Salt Water Company's notification to the City that they would not longer be able to supply salt water to the Aquarium because they were going to dispose of their reservoir at Masonic Avenue near Geary Boulevard. It was decided that the City would construct an independent salt water supply system for the Aquarium and in conjunction therewith investigate the use of an infiltration type intake instead of the more common pier-supported intake pipe.

If field investigation indicates the infiltration type to be feasible, the cost as compared to the otherwise required pier-supported intake will be reduced by more than 40%. Another advantage is that the water furnished is expected to be of unusual clarity, turbidity being less than 1.0, thereby reducing the amount of treatment required to make the water suitably clear for aquarium display tanks. The infiltration-type system permits pumping during any normal variation of tide thus eliminating the restriction of being able to pump suitable water only at high tide, a situation inherent in the existing Ocean Salt Water Company because of its pier-supported intake pipe.

The infiltration-type intake depends on the existence of a stratum containing sufficient gravel or shells, or a combination thereof. Perforated pipes are projected horizontally into the sand below the surf from a vertical caisson sunk below the beach near the mean water line. During construction, material fine enough to pass through the perforations is allowed to wash continuously into the caisson for removal while the screen is being projected, leaving a permeable pack of coarse material surrounding the outside surface of the perforated pipe. For a successful installation there must be sufficient coarse material to bridge the perforations and form a satisfactory pack. This method permits the installation of horizontal collectors under the surf where an open-trench operation would be extremely difficult.

It is also of primary importance that the quality of the collected salt water will provide an environment suitable to marine life. Dilution of sea water by fresh ground water must be kept to a minimum.

A consulting firm specializing in development of water supplies is presently conducting a hydrogeological survey for the City for the basis of a recommendation.

Presidio Branch Library

Installation of a new automatic gas-fired boiler at the Presidio Branch Library in place of the existing oil-fired boiler was undertaken and was 99% complete at the end of the fiscal year. In addition to using natural gas in place of the more expensive fuel oil, the new boiler will provide a reliable facility free of excessive maintenance cost and reduce the amount of smoke and fumes emitted in the area.

Contract cost for the boiler replacement was $3,918.00.

City Hall Rest Rooms

The renovation and modernization of the rest rooms in the northeast quadrant and northwest quadrant of the City Hall was completed during the fiscal year.

Contract costs for these projects were $18,018.00 and $19,474.00 for the northeast and northwest quadrants respectively.

This work is part of a continuing project which is now 75 percent complete, the southeast quadrant remaining to be done.

Civic Auditorium Roof Drains

Replacement of the southeast branch of the roof drain piping at the Civic Auditorium was completed in June of 1960 at a contract cost of $2,555.00.

This contract is the final one of a series which complete the replacing of the roof drain piping and rebuilding of roof drains, all originally installed in 1918.

Candlestick Park Fire Protection

An emergency contract for the installation of suitable fire protection equipment for Candlestick Park, including a sprinkler system, was let in March of 1960.

Work on this project, the contract cost of which was $74,099.32, was 75 percent completed by the end of fiscal year 1959-60.

Mechanical Work Included in Bureau of Architecture Contracts

During the fiscal year, plans, specifications and cost estimates for mechanical work were made for inclusion in certain Bureau of Architecture contracts. The total cost of mechanical work included in the various contracts was approximately $450,000.00, of which $201,600.00 was for mechanical work for the new San Francisco City Hospital Consolidated Laboratories and included normal plumbing, acid resisting plumbing, heating, ventilation, refrigeration facilities, a central distilled water system, bacteriological incubators and special ventilation for exhausting noxious or potentially contaminated fumes from the area.

Richmond-Sunset Sewage Treatment
Sludge Control Building
Ventilation and Odor Control

A contract was awarded for the installation of a new exhaust and odor control system for the Sludge Control Building at the Richmond-Sunset Sewage Treatment Plant and was 90 percent completed at the end of the fiscal year. This system, replacing the existing system destroyed by corrosion, will double the previous capacity and redistribute the ventilation to critical areas.

Studies were made to determine the most economical type of duct material to be used for this purpose and it was decided to specify Type AISI 316 stainless steel. The fans were specially coated to ensure long life.

Contract cost for this project is $4,993.00.

Fitgerald Sewage Pumping Station

A contract for enlargement of the Fitzgerald Sewage Pumping Station, necessitated by additional sanitary flow from the new Candlestick Park Baseball Stadium, was let in February of 1960. This added capacity will divert peak sanitary flows to the Southeast Sewage Treatment Plant, thereby preventing discharge of raw sewage into San Francisco Bay. This work has been temporarily delayed pending completion of the baseball season.

Contract cost for this project is $5,268.00.

Building Lighting

The Bureau of Engineering continued its work of improvement of public buildings by means of new lighting systems. Again, it has been shown that there is nothing that can be done to an old building that enhances it beauty and improves its usefulness as much as a modern lighting system.

The Bureau of Engineering prepared contracts and received bids for improvement of the lighting in the following buildings:

City Hall - Assessor's Office	$18,000.00
(Main Library - Circulation Department (Children's Room and Periodical Room	18,337.00
Sunset Branch - Libary	6,034.00
(Richmond Branch and (Presidio Branch Libraries	13,132.00

The lighting system installed in the Main Library Catalog Room and Main Stairway, making use of color-improved mercury vapor units and recessed incandescent lighting respectively, has been acclaimed by illumination experts as one of the outstanding lighting jobs in the Country. The improved lighting system has not only made the library more efficient and useful, but has revealed a wealth of beautiful architectural detail long lost in the gloom of the original lighting system. It is expected that this installation will set an example of good practice in the lighting of large rooms with high ceilings and especially where there is architectural detail that should be preserved.

Street Lighting

The Bureau of Engineering continued its work of improvement of the street lighting system in San Francisco during the past year. This activity is unique among City enterprises in that by spending money, the City saves money and provides a better service.

The capital investment in street lighting is derived from gasoline taxes and thus is no burden on the property owner. Furthermore, the rates paid for street lighting energy and maintenance for City owned systems are so much lower than those for Utility Company ownership that the systems actually pay for themselves, and as the City ownership expands, will have the effect of reducing the tax rate below that in existence with Utility owned street lights.

During the past fiscal year, City owned street lighting systems were installed on the following streets:

Clarendon Avenue	$12,700.00
Sunnydale Avenue	3,508.00
Harney Road at McKinley Avenue	6,500.00
Hunter's Point Service Road	10,600.00
Giants Drive	6,665.00

In addition, other contracts, in amounts shown, have been let or are pending for the following work:

Thirteenth Street between South Van Ness Avenue and Mission Street	$20,935.00
Jackson Street	13,000.00
Jefferson Street	18,899.00
Otis, McCoppin & Duboce Avenue, South Van Ness Avenue and Mission Street	35,600.00*
San Bruno Avenue	9,000.00*
Clarendon Heights	30,000.00*
Parnassus Avenue	18,000.00*
Seventh Street, Bryant Street and Harriet Street	11,000.00*

*Estimated

In the next year, the Bureau of Engineering expects to install street lighting systems at the indicated estimated cost on the following streets:

California Street, between Kearny Street and Van Ness Avenue	$65,000.00
Divisadero Street between Chestnut Street and Marina Boulevard	35,000.00
Francisco Heights	9,200.00
Taylor Street between Bay and Jefferson Streets	15,800.00
Lombard Street	46,000.00

It is hoped that construction funds will be available for these projects and others in the future, so that the savings, which range from $32.00 to more than $150.00 per year per luminaire for the types usually installed, will create a substantial saving to the taxpayer, and at the same time, provide everyone with a brighter, safer and more beautiful city.

Market Street Path of Gold

A competition was held during the past year among the leading manufacturers of street lighting equipment to design a unit suitable for the rehabilitation of the Path-of-Gold on Market Street between The Embarcadero and Valencia Street. Six (6) samples were installed on Market Street between Third and Fourth Streets by the interested participants. The Department of Public Works, in cooperation with the Downtown Association, examined all the installations and gave special consideration to the artists' conceptions of the final appearance of Market Street using each of the units submitted. After much deliberation, it was decided to retain the existing luminaries and increase their light output by the installation of 400 watt mercury vapor lamps. The work of repair of the poles and historical base castings will be accomplished during the next year. When complete, the system will have approximately twice the light output of the existing incandescent system and will be restored and painted to its original condition.

Landscaping

GENERAL

The program for the landscaping of the City's major thoroughfares and other civic improvements continued to progress during the fiscal year.

The most notable current landscaping projects are as follows:

Portola Drive

The landscaping of Portola Drive between Twin Peaks Boulevard and Sloat Boulevard was completed during the fiscal year at a contract cost of $37,552.12.

Market Street

Landscaping work in the vicinity of the viaduct at Corbett Street has been completed and at the end of the fiscal year was being maintained by the Contractor to establish growth.

Contract cost was $13,321.26.

A contract to landscape various city owned lots in the Upper Market-Portola Drive area was awarded at the close of the fiscal year, at a contract cost of $36,102.95.

Plans and specifications for the stabilization of the eroded area adjacent to Twin Peaks Boulevard and Portola Drive intersection were being completed at the close of the fiscal year. The estimated cost is $6,600.

Geary Boulevard

The center island planting of Geary Boulevard between Masonic Avenue and 33rd Avenue was completed during the fiscal year. The contract cost was $14,084.69.

Jackson Square - Second Contract

In the vicinity of Jackson Square and the Federal Customs and Appraisers Building, trees were planted along the sidewalk areas in pits provided by the property owners. This work was finished during the fiscal year by City forces at a cost of $1,096.28.

Christmas Tree Point

The development of the Christmas Tree Point Park area on Twin Peaks Boulevard was completed during the fiscal year. The contract cost was $11,415.50.

Miscellaneous Landscaping Projects

Plans and specifications for the following miscellaneous landscaping projects were in progress during the fiscal year:

Project Title	Estimated Cost of Landscaping
Brotherhood Way	$ 6,750
Mansell Street	99,000
Geary Expressway (Incl. Irrigation)	68,000
Gilman Avenue	13,000

Garbage Disposal

GENERAL

Since 1932, all garbage and refuse collected in San Francisco has been disposed of by the sanitary fill method in the tidal flats of San Francisco Bay. The method is a sanitary means of disposal, economical and profitable to all concerned, resulting in the reclamation of the tidelands. Two licensed scavenger companies make the collections which are delivered to the disposal site operated through the jointly financed Sanitary Fill Company. The City controls collections rates and enforces public health regulations.

Collection and Disposal

Unsegregated garbage and refuse is picked up in the residential districts once a week. In the downtown districts, where large amounts of paper and garbage accumulate, general collections are made three times a week, and at large hotels, restaurants, etc., collections are made daily. The collectors salvage paper, rags, bottles and other revenue items en route and at the sorting shed prior to the weighing of garbage designated for the fill. Although the refuse trucks have a capacity of about 20 cubic yards, the average load incorporated in the fill is approximately 18 cubic yards.

The scavenger companies collect six days a week or about 312 days a year. The Sanitary Fill Company operates 5-1/2 days a week from 4:30 a.m. to 3:00 p.m. daily except Saturday when dumping is stopped at 11:00 a.m., as collections are about 60% of the normal week day collections.

Sanitary Fill Disposal Site

The disposal site is located just south of the City's southerly boundary on the Southern Pacific Company's property. It is bounded by the Southern Pacific Company's Bayshore switching yards on the west, by the Bayshore Freeway on the east and a dike across Candlestick Lagoon just north of Guadalupe Canal on the south side. The earth material used to cover the garbage is located at the north end of the fill site. Approximately 15 acres are in various stages of the fill and cover operation. Some 260 acres have been filled to completion and, of these, there are about 35 acres being used by light industry.

Fill and Cover Operation

The Sanitary Fill Company conducts the fill and cover operations through a subcontractor.

The fill and cover method of disposal is essentially a daily garbage fill with an earth seal creating separate cells within the fill. Sandy clay, which forms an excellent seal around the garbage, as well as rock which is necessary for access roads during wet weather operations, is available in the immediate vicinity, particularly from Candlestick Hill. The combined compaction of the garbage fill and the underlying bay mud generally allows for many separate fills, each approximately 20 to 25 feet thick, one on top of the other. Interference of hauling operations with traffic to the Candlestick Park Stadium was avoided by completing the McKinley Street haul road overpass.

Odors Along the Freeway

Because of the prohibition of depositing garbage in Candlestick Lagoon located easterly of the Bayshore Freeway just south of the County line, much of the odor nuisance along the adjacent Freeway has been reduced. The lagoon is now being dewatered by pumping, in conjunction with the use of a dike and tidegate which were completed early in the fiscal year. At the end of the fiscal year 80 percent of the lagoon area was no longer covered by water.

The excavation of the existing drainage ditch through the fill for the 8-foot sewer of the Bayshore Sanitary District was completed in August 1959. The odors from the excavated ditch materials and raw sewage were very strong and objectionable. To overcome this nuisance, the spoil material was sealed by earth and a chemical masking material was added to the sewage to abate odors.

TABLE II
GARBAGE COLLECTION AND DISPOSAL STATISTICS
CALENDAR YEARS 1958 AND 1959

	1958	1959
GARBAGE COLLECTION		
Trucks used, average	169	-
Trips per day	293	293
PAPER COLLECTION		
Flat-bed trucks, used	Not Available	
Amount collected, tons	Not Available	
Amount salvaged	Not Available	
Amount dumped, tons	13,308	13,690
INCOME OF SANITARY FILL CO.	$318,269.69	$326,348.55 (1)
FILL AND COVER EXPENSE		
Operations	$274,170.64	$290,504.33
Road Maintenance	12,510.00	13,608.00
Administration, Inspection & Legal	60,201.52	78,259.08
Ditch, Dike, Fence, etc. (Amortize 7 yrs.)	---	27,489.30
Total Expense	$346,882.16	$409,860.71
GARBAGE AND REFUSE HANDLED		
City of San Francisco, tons	276,756.25	280,717.83
Other sources, tons	427.27	---
Total tons	277,183.72	280,717.83
Quantity per day, tons (312 days)	889	903
Cost of Disposal per ton	$1.249	$1.456
COVER MATERIAL		
Quantity Used, cu. yd.	267,010	296,820
Total Cost	$160,236.71	$169,094.73
Cost per cu. yd.	$ 0.60	$ 0.57
Cover per ton of garbage and refuse cu.yd.	0.93	1.055

Total truck loads of garbage and refuse	91,271	91,344
Total truck loads of waste paper destroyed	2,358	3,040
Average weight per load of garbage, tons	3.02	3.08
Average weight of garbage per cu.yd., pounds	336	342

Total Income		
1/1/1959 to 11/30/1959	257,230.90 tons at $1.15	
12/1/1959 to 12/31/1959	23,486.93 tons at $1.30	
	280,717.83	$326,348.55

The Sanitary Fill Company accepted no industrial refuse or trash except that of the Southern Pacific Company, cleanup tracks of the California Highway and street sweepings and sewer disposal refuse from the City of San Francisco. The average weight per cubic yard continues to be very low indicating a much larger volume of paper, cardboard cartons, etc.

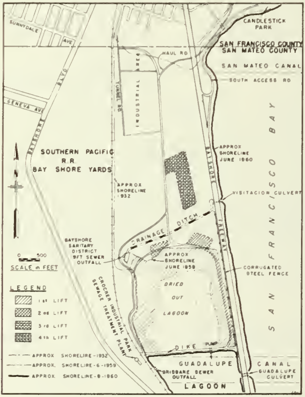


FIG. 4
GARBAGE DISPOSAL SITE

DIVISION OF TRAFFIC ENGINEERING

The Division of Traffic Engineering analyzes and interprets traffic information and on the basis of such data, recommends the improvement of traffic facilities.

Administration

Supervision of the Division of Traffic Engineering is exercised by a Senior Traffic Engineer. The Division is staffed as follows:

Administration	-	2
Clerical	-	5
Design	-	2
Planning	-	4
Downtown	-	2
Operations	-	12

While legislative procedures have been transferred to the Division as noted in last year's report, the proposed expansion visualized in Plan C as mentioned in previous reports, has not yet taken place.

Parking

In the last year, 100 formal parking checks, covering 2, 275 stalls, were made for the Department of City Planning in connection with the One for One Parking Ordinance. In addition, reports or studies were also made for the San Francisco Parking Authority on the following projects:

1. Aquatic Park Underground Garage
2. Fifth and Mission Garage
3. Washington Square Underground Garage
4. Portsmouth Square Garage
5. Sutter-Stockton Garage
6. Hall of Justice Parking Lot
7. Motor-Scooter Parking
8. Civic Center Garage
9. Neighborhood District Parking Program

The Neighborhood District Parking Program report was an extremely comprehensive survey covering the parking needs, both present and future, of the neighborhood shopping districts of San Francisco. It utilized the services of 125 observers in obtaining data on 51 neighborhood shopping districts. The report concluded that there would be a shortage of 2164 parking spaces in 43 of these districts in 1980 and recommended the construction of 55 off-street lots with 2080 spaces in 24 of the districts, the estimated construction cost of the lots being $7,000,000. It also recommended that more effective use of curb parking be made by the introduction of time-limit parking in some areas, installation of parking meters in others, the reinstitution of morning time-limit parking and the institution of special holiday parking regulations.

Also of interest was the development of a standard policy to cope with the requests of people in residential areas close to business districts, transit terminals, or college areas for parking restrictions to prevent all-day parking. These requests, which in some cases are merited and in other cases are not, are now measured by an objective yardstick before a recommendation, either for or against them, is made to the Board of Supervisors. To meet requirements for time-limit parking, a survey of a residential area should show the following:

1. At some time during the day, at least 70% of the parking spaces on the block are occupied.
2. At least 30% of the spaces should be occupied by long-time parkers (4 hours or over).

These figures adopted on the basis of the Division's judgments have seemed to work quite well in the past year and have not required adjustment as of this time.

NEIGHBORHOOD SHOPPING DISTRICT PARKING LOT

Traffic Planning

Shown below is a partial list of projects, exclusive of parking, for which studies and reports were made or advice concerning aspects of design were given:

1. Various subdivision layouts
2. Street vacations
3. Bay Bridge Reconstruction Project
4. Civilian Defense Evacuation Plan
5. Southwest High School
6. Clarendon School
7. Southeast High School
8. Midblock crosswalks at 5th and Market
9. Western Addition Redevelopment
10. Franklin Street One-Way

Traffic Counts

The traffic counting program continued at its previous pace, and this year witnessed the issuance of another 24-hour traffic flow map.

Traffic Signals and Channelization

Five traffic signal and channelization contracts, three of which (Lombard Street Rewiring, 19th Avenue Rewiring, and the Third Signal Modification Contracts) provided either for replacing worn out signal equipment or for modifications such as WALK-WAIT pedestrian signals or additional signal heads. A minor contract provided for the installation of mid-block traffic signals on Market Street between Fifth and Mason Streets; and under another contract the intersection of Lincoln Way and Kezar Drive was rechannelized in a $30,000.00 project in order to eliminate crossing and weaving conflicts and reduce accidents.

Candlestick Park

Tuesday, April 12, 1960, the opening day of the San Francisco Giants 1960 baseball season, witnessed the culmination of many months of intensive traffic planning by the Division to handle the huge traffic loads generated by the new Candlestick Park Stadium. The pre-game traffic proved to be almost a miracle of smoothness, and the post-game problem, although presenting some congestion, was so minor compared to doleful, pre-season predictions that the entire program drew considerable praise from citizens and press alike. Checks by the Division have shown that on capacity days, when over 9,000 vehicles are accommodated in the immediate area, the Candlestick Park parking lot is emptied in 45 minutes, and all traffic is freely moving within an hour and five minutes after the game time ends. Traffic engineering tools thrown into the fight to move traffic fluidly include 6.9 miles of towaway streets, 3.6 miles of streets with reversible lanes, and 1.7 miles of reversible one-way streets. All controlled by approximately 950 traffic signs designed by the Division and installed under contract by the California State Automobile Association. Special signal programs activated by the police officers in pregame and post-game periods are also used.

To lessen inconveniences to residents, caused by special traffic regulations, such as towaway, over 3,000 explanatory pamphlets were prepared and distributed to households in the vicinity. 2,000 pamphlets were also prepared and distributed to San Francisco citizens, explaining the best way to get to Candlestick Park by both automobile and transit.

SPECIAL REGULATION SIGNS
POSTED ON STREETS IN
VICINITY OF
CANDLESTICK PARK STADIUM

TABLE III
TRAFFIC, FACILITIES, IMPROVEMENTS, AND LEGISLATION

TRAFFIC SIGNS

	Completed 1959-1960
Parking Signs Installed	1,309
Parking Signs Repaired or Changed	326
Parking Signs Removed	795
Other Signs Installed	709
Other Signs Repaired or Changed	542
Other Signs Removed	91
Stop Signs Installed	142
Stop Signs Repaired or Changed	219
Stop Signs Removed	52
Total	4,185

Approximate Cost 1959-1960.........$52,000.00 estimated

Total Number in Place June 30, 1960.......21,200 estimated

STREET NAME SIGNS

Street Signs Repaired or Changed	967
Street Signs Installed	42
Total	1,009

Approximate Cost 1959-60 ....$23,319.93

Total Number in Place June 30, 1960 ......7,600 estimated

PARKING METERS

New or Amended Zones	1
New Installations	147
Removals	200(1)
Installations	200(1)
Relocations	450(2)
Temporary Removals	375(2)

Approximate Cost 1959-60 .... $7,709.00
Total Number in Place June 30, 1960 12,625

The above table does not include the normal maintenance of parking meters performed by the Department of Electricity.

(1) Removals and Installations due to the constant change of drop curbs and colored curb spaces in metered areas.

(2) Due to large building program of private and City interests.

TABLE IV

	Completed 1959-1960	Approximate Cost 1959-1960
TRAFFIC PAVEMENT PAINTING		
Standard Striping, miles	567	$ 49,027.39
12-inch Stripes, miles	136.7	85,706.29
Pavement Words (Units) (Cost included in other items)	11,817	
Bus Zones (Units)	1,601	9,838.97
Parking Stalls (Units - all types)	7,856	6,501.54
Total Cost		$151,074.19
New School Intersections	60	
Total School Intersections in Place June 30, 1960		839
Pounds of Reflective Beased Used		31,555

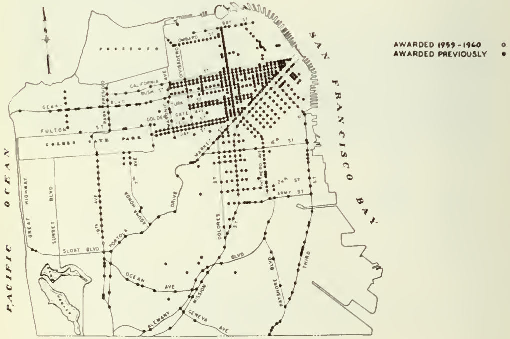


FIG. 5
3-LIGHT TRAFFIC SIGNAL INSTALLATIONS

TABLE V

	Completed 1959-1960	Number in Place 6-30-60
SIGNALIZED INTERSECTIONS		
Wiley Type Signals Replaced	9	
3-Light Installations	19	686
Net Increase	10	
Wiley Type Signals Existing		1
Total Signals		687
Equipped with Pedestrian Signals	10	173
Actuated Signals Added	4	169
CHANNELIZED INTERSECTIONS		
Concrete Islands	21	213
Raised Pavement Bars	5	30
Total	26	243
DIVIDED ROADWAYS		
Concrete Center Islands, miles	0.38	52.3

TABLE VI

	Completed 1959-1960	Deleted 1959-1960	Number in Place 6-30-60
LEGISLATION			
Stop Intersections	80	2	1575
Yield Intersections	8	5	29
Through Streets	2.8 mi.	0	93.5 mi.
One-Way Streets	1.5 mi.	0	74.2 mi.
Speed Zones (Other than 25)	4.5 mi.	0	49.2 mi.
Turn Restrictions (24 hours)	25	1	
Turn Restrictions (Peak Hours)	30*	0	
Meter Block Faces	8	0	1636
Towaway Block Faces	120	23	645**
Time Limit Block Faces	86	0	
Angle Parking Block Faces	38	2	

Miscellaneous Legislation - 10 Items, including Crosswalks, Reversible Lane and One-Way Street Operation for Ball Park.

* - Includes 27 Turn Restrictions for Candlestick
** - Includes 99 Block Faces of Towaway for Candlestick

DIVISION OF SURVEYS AND MAPPING

General

The Field Surveys Section of the Division of Surveys and Mapping utilized six field parties in undertaking and completing 333 surveys.

The Administrative and Mapping Sections of the Division made investigations and studies of, and recommendations on, tentative and final subdivision maps, record of survey maps, proposed street openings, street widenings and vacations, easement acquisitions and abandonments, changes in official widths of sidewalks, changes in official grades of streets, actions to quiet title, and many other miscellaneous actions relating to property; and in addition, the Mapping Section prepared street dedication and vacation maps, survey plats, and other maps and plats relating to the aforementioned investigations and studies.

Hereinafter is described in detail the accomplishments of the Division of Surveys and Mapping for the fiscal year.

Types of Field Surveys

The aforementioned total of 333 field surveys comprised the following general types:

Public Improvement Surveys for

Public Assessment and Private Contracts	52 Surveys
Contracts Financed by City	278 Surveys

Site and Lot Location and Topographic Surveys for:

Bureau of Architecture	2 Surveys
San Francisco Redevelopment Agency (For Diamond Heights Subdivision)	1 Survey
Recreation and Park Department	None
Real Estate Department	None

Extent of Field Surveys

The aggregate length of surveys completed totaled 73.77 miles, in addition to which 6.48 acres of topographic surveys were completed. The aggregate length, which was the sum of the various project lengths except where not applicable, comprised the following lengths segregated by categories of work:

Cross sections required for quantity estimates and for street, structure, sewer and drainage design	2.38 Miles
Line and grade for construction of:	
Sewer and drainage systems	5.03 Miles
Street grading	2.70 Miles
Pavements and curbs	4.36 Miles
Line, grade and cross sections for the reconstruction of existing:	
Pavements	0.76 Miles
Pavements including track removal	0.01 Miles
Curbs and gutters	None
Post-construction examination of:	
Sewer and drainage systems	2.80 Miles
Street grading	3.20 Miles
Pavements and curbs	4.39 Miles
Subsidence areas	15.60 Miles
Slide areas	2.76 Miles

Block, site and lot (based on frontage length):	
Surveys	0.66 Miles
Resurveys	9.11 Miles
Reference cuts	None
Monument lines checked	0.86 Miles
Grade studies	None
Miscellaneous surveys not included in the above	19.14 Miles

Monuments

In addition to the aforementioned checking of existing monument lines, 10 monuments were reset and referenced, and 21 monuments were examined for repair and, where necessary, repaired.

Precise Land Surveys

Precise level bench marks established, and new elevations determined on existing bench marks, totaled 222, requiring the running of approximately 14.47 miles of precise levels.

Tentative Subdivision Maps

Tentative Subdivision Maps investigated and reported on for the Advisory Agency were:

Crocker Amazon Tract Subdivision No. 3
Southern Hills Subdivision No. 1
Sheldon Estates Subdivision
Proposed Resubdivision of a Portion of Block 6034

Final Subdivision Maps

Final Subdivision Maps, checked, approved by the Advisory Agency, adopted as official maps by the Board of Supervisors and filed in the office of the Recorder were:

Sherwood Forest Subdivision No. 2
Forest Knolls Subdivision No. 3
Map showing the Amendment of a Portion of the Map of Midtown Terrace Subdivision No. 3
Crocker Amazon Tract Subdivision No. 3

Street Dedication Maps

Street Dedication Maps prepared, adopted by the Board of Supervisors as official maps and filed in the office of the Recorder were:

Map showing the Widening and Extension of Marietta Drive and the Extension of El Sereno Court

Map showing the Widening of Holladay Avenue at Esmeralda Avenue

Map showing the Widening of Woodside Avenue from Laguna Honda Boulevard to Portola Drive

Map showing the Widening of Portions of Mission, Fifth and Minna Streets

Map showing the Widening of Ankeny Street from Holyoke Street to Ordway Street

Map showing the Opening of Christopher Drive from Clarendon Avenue to Glenhaven Lane and Crestmont Drive from Christopher Drive to its Westerly Termination

Map showing the Opening of Ahern Way from Harriet Street to Sixth Street

Map showing the Widening of Alemany Boulevard at Mission Street

Map showing the Extension and Realignment of Clipper Street from Douglass Street to Burnett Avenue

Map showing the Widening of Industrial Street from Bayshore Boulevard to Oakdale Avenue and the Widening of the Intersection of Shafter Avenue and Elmira Street

Map showing the Widening of Mansell Street from University Street to San Bruno Avenue

Record of Survey Maps

Record of Survey Maps checked and filed in the office of the Recorder were:

Record of Survey Map of a Portion of Block 2131A, Map of Golden Gate Heights

Record of Survey Map of 50 Vara Block No. 142

Record of Survey Map of a Portion of Assessor's Block 7276

Record of Survey Map of a Portion of Assessor's Block Nos. 3002 and 3003

Record of Survey Map of a Portion of Excelsior Homestead Association, Block 30

Record of Survey Map of Portions of Assessor's Blocks 2968B and 3000A

Record of Survey Map of Portions of Assessor's Blocks 2949A and 2968A

Record of Survey Map of Portion of Assessor's Block 5330

Record of Survey Map of Portion of Assessor's Block 6034

Record of Survey Map of Portion of Assessor's Block 5639

Official Grades

Changes in the official grades of streets recommended and subsequently adopted by the Board of Supervisors were:

Brotherhood Way	Between Thomas More Way and Lake Merced Boulevard
Innes Avenue	Between Mendell Street and 90 feet SE'ly
Castro Street	Between Duncan and 28th Streets
Arch Street	Between Shields Street and 225 feet southerly
Burnside Avenue	Between Mangels Avenue and Boswoth Street

Other Office Work

More than sixty miscellaneous drawings were prepared in connection with property acquisition and disposition, street openings, widenings and vacations, and easement acquisition and abandonments.

Twenty-four reports regarding City interest in actions to quiet title, were made to the City Attorney's office.

Eleven appeals from decisions of the City Planning Commission were checked to determine whether the signatures represented at least twenty percent of the owners within a radius of 300 feet of the property involved so as to qualify for consideration by the Board of Supervisors.

One hundred twenty-four descriptions for deeds to and from the City were checked.

DIVISION OF CONSTRUCTION

This division's functions are carried out by three sections; namely, the Inspection Section, the Records and Technical Services Section, and the Testing Laboratory.

The Inspection Section provides engineering control for all Public Works contracts administered by this Bureau.

The biggest problem faced by the Division is keeping abreast with the latest construction methods, techniques, equipment and materials, and determining their applicability to Public Works Contracts should the contractor elect to use such new methods.

Laboratory and Testing

The testing laboratory is operated as a section of the Division of Construction.

The activities of this section include the inspection and testing of materials furnished by contractors and bidders on various contracts for the Bureau of Engineering as well as on contracts for construction of schools, firehouses, libraries and other buildings constructed under jurisdiction of the Bureau of Architecture.

In addition, tests were conducted on soaps, detergents, paint, varnish, grease, lubricating oil, glass beads for traffic lines, traffic lacquers and many other items, for the Purchaser of Supplies, to determine the compliance of these items to City specifications.

This section also conducted tests of construction materials for departments under the Public Utilities Commission, tests of inflammable materials for the Bureau of Fire Prevention, and cast iron and and bronze and miscellaneous materials for the Fire Department.

Concrete

Concrete, concrete aggregates, sand and cement used on City contracts were checked and tested. Routine inspection and tests were made at concrete plants furnishing premixed concrete.

Results of compression test of concrete cylinders from various projects continued to test well above specifications.

The use of calcium chloride, in lieu of high early cement, has been continued with very satisfactory results. No deleterious effects of this addition has been experienced.

Asphalt

Local asphalt plants have continued the use of manufactured sand, blended with natural sands, in the construction of asphalt pavements.

The use of local "red rock" as coarse aggregate was tried in the surface mix on the parking area of the Candlestick Park and portions of pavement on Clarendon Avenue.

The results, with the proper asphalt content, were satisfactory. However, there was a tendency to show a reddish brown discoloration

Administrative Section	Vacant, Engineer
Structural Design Section	R. G. Lee, Engineer
Sewer Section	R. F. Lauenstein, Engineer
Sanitary & Special Projects Section	A. O. Friedland, Engineer
Mechanical Section	D. H. Matlock, Engineer
Electrical Section	A. E. Tanner, Engineer
Specifications Section	J. Lee, Assistant Engineer
Utilities Section	W. R. Daly, Senior Draftsman

PAYROLL

The following tabulation shows the number of employees and total payroll charged to General and Project Funds.

Source of Payroll Funds	Employees End of Year	Payroll 1959-60
General Fund (Budget Payroll)	59	$ 469,431
Project Funds - Gas Tax, Bonds, Etc.		
(Interdepartmental Payroll)	144	1,098,648
(Traffic Engineering Payroll)	27	182,536
TOTALS	230	$1,750,615

RETIREMENT AND DEATHS

During the past year the following employees were retired from service and recognition is given to their faithful service in organization:

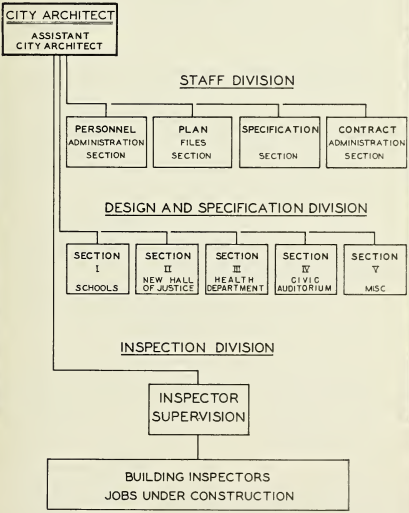
G. M. Cushing	Retired	9- 1-59	Inspector of Public Works Construction	12 Years
N. F. Yde	Retired	10-31-59	Civil Engineer	31 Years
L. R. Bolei	Retired	11-17-59	Typist	20 Years
W. C. Schrick	Retired	12- 1-59	Senior Clerk	24 Years
W. J. McKee	Retired	2- 1-60	Head Clerk	34 Years
M. F. Blakemore	Retired	4- 1-60	Stenographer	6 Years
IN MEMORIUM				
H. B. Nelson		9-17-59	Junior Engineer	9 Years

BUREAU OF ARCHITECTURE

DEPARTMENT OF PUBLIC WORKS

ORGANIZATION CHART

JUNE 30, 1960


CITY ARCHITECT
ASSISTANT CITY ARCHITECT
STAFF DIVISION
PERSONNEL ADMINISTRATION SECTION
PLAN FILES SECTION
SPECIFICATION SECTION
CONTRACT ADMINISTRATION SECTION
DESIGN AND SPECIFICATION DIVISION
SECTION I SCHOOLS
SECTION II NEW HALL OF JUSTICE
SECTION III HEALTH DEPARTMENT
SECTION IV CIVIC AUDITORIUM
SECTION V MISC
INSPECTION DIVISION
INSPECTOR SUPERVISION
BUILDING INSPECTORS JOBS UNDER CONSTRUCTION

BUREAU OF ARCHITECTURE

FUNCTIONS

The Bureau of Architecture is charged with the responsibility for the design and construction of new City buildings, and the modernization, remodeling, and such maintenance projects on existing City buildings as may require plans and specifications or which may exceed $2,000.00 in cost. The activities of the Bureau are divided into two separate but related general functions: (1) the preparation of drawings, specifications, and estimates; and (2) the supervision of construction.

Once the need for a building project is established, the Bureau assists the Department which will occupy the structure in the preparation of a basic program. This program consists of general information relative to the functions to be performed in the building, the number and type of employees who will be housed in the building, the public to be served, and related data. The Bureau then prepares preliminary drawings, specifications, and estimates of costs, and when funds are made available, the working drawings, specifications, and final estimates. The bid forms are then prepared, and the project advertised. After bids are received they are carefully analyzed and recommendations are prepared concerning award of contract. After award of contract, Bureau personnel inspect the work under progress, certifying its completion in conformance with the contract, together with progress and final contract payments.

The amount of work in the Bureau has been steadily increasing, and as of July 1, 1960 was as follows:

	No. of Jobs	Amount
1. Preliminary Design Stage	4	$14,800,000.00
2. Working Drawings Stage	83	9,989,000.00
3. Under Construction	94	27,321,569.00
4. Contracts Completed (1956-60)	95	4,310,463.00
Total	276	$56,421,032.00

In addition, preliminary data has been prepared for four Bond Issues in total amount of $41,040,000.00.

Organization

The Organization Chart indicates in very brief manner the breakdown of divisions which has been found to be efficient in processing the Bureau's work. The City Architect is the Bureau Head and is assisted in discharging his responsibilities by the Assistant City Architect. The organization of the bureau is broken down into three separate Divisions:

STAFF DIVISION

Section I - Personnel

This section is responsible for fiscal arrangements and work orders for both architectural and related engineering services.

Section II - Plan Files

This section is responsible for requisitions and procurement of blueprints, assembly of blueprints, specifications and bid forms, the filing of tracings, blueprints and specifications, and related work.

Section III - Specifications

This section is responsible for specification standards, the coordination and accuracy of the general conditions affecting the contract, the mechanics of editing, checking mimeographing and assembling of the specifications.

Section IV - Contract Administration

This section is responsible for the coordination of jobs under construction. All correspondence, shop drawings, reports, etc., relating to jobs under construction are cleared through this section.

Design and Specification Division

The responsibility for processing the various jobs from initial inception to the completion of the final drawings, specifications and estimates is divided into five separate sections. Each of these sections is headed by an architect who not only maintains formal and informal relationships with the client agency but also supervises the personnel assigned to him for the preparation of the drawings and specifications.

The five sections are:

Section I	- School
Section II	- Hall of Justice
Section III	- Health Department
Section IV	- Civic Auditorium
Section V	- Miscellaneous

INSPECTION DIVISION

This Division supervises and inspects all work under construction. The responsibilities of the Inspection Division include progress and validity of the contract work, contract payments, and certification of completion of the contract. The number of contracts under construction is 94 and the amount is $27,321,569.00.

The Inspection Division is headed by an architect and there are two Supervising Construction Supervisors who supervise the building inspectors who are assigned directly to the construction jobs.

A secondary responsibility of the Inspection Division is concerned with jobs completed throughout the previous fiscal year. The amount of work which will be done on the completed jobs is indeterminate, but in certain cases will be considerable. A thorough inspection must be made at the end of the year bonded guarantee period one year after the acceptance of the job, and any defect found which is the result of faulty materials or workmanship must be corrected by the contractor. A situation often develops in which much correspondence and many conferences are involved when such defective work is discovered, and considerable time is always required to effect a proper disposition of such cases.

BOND ISSUES

The greatest amount of the Bureau's work is processing work for which bonds have been voted. The bond issue work being processed at present is as follows:

I - 1952 Fire Department Bond Issue: $4,750,000.00

Two new firehouses, Engine House No. 15, 2153 California Street, and Engine House No. 14, Oak and Franklin Streets, were placed under construction during the fiscal year. These two firehouses are the final projects of the Bond Issue. The status of the Bond Issue as of July 1, 1960, is as follows:

A. Construction Completed (88%)

New Firehouses

Engine No.	Location	Amount
4	676 Howard Street	$ 195,641.33
*10	19th and Folsom Streets	576,869.00
11	Shafter and Ingalls Streets	223,114.36
12	Drumm and Commercial Streets	486,717.72
13	26th near Church Street	262,294.21
26	Presidio and Euclid Avenues	296,482.28
34	Turk and Webster Streets	225,999.43
38	Ocean and Phelan Avenues	264,700.00
40	Stanyan and Grattan Streets	248,672.13
41	1325 Leavenworth Street	169,458.86
45	45th Ave. near Irving Street	159,129.16
21	Grove St. nr. Baker St.	182,511.00
	Subtotal	$3,291,589.48

* - $128,837.00 from Bond Funds and
$448,032.00 from Budget appropriations

Reconstruction of Existing Firehouses

Engine No.	Location	Amount
5	1340 Powell Street	$ 117,410.57
6	356 - 7th Street	122,297.00
20	2239 Greenwich Street	136,977.39
25	3rd and Arthur Streets	22,122.36
33	117 Broad Street	4,198.21
36	551 - 26th Avenue	19,931.51
39	1091 Portola Drive	84,325.01
46	441 - 12th Avenue	70,996.32
47	499 - 41st Avenue	56,072.90
49	2155 - 18th Avenue	28,914.16
24	100 Hoffman Street	15,691.96
	Subtotal	$ 678,937.39

Total number of completed projects: 23
Total construction cost: $3,970,526.37

B. Under Construction (12%)

Engine No.	Location	Amount	Type
15	2150 California St.	$321,500.00	New Firehouse
14	Oak nr. Franklin	252,111.00	New Firehouse
	Subtotal	$573,611.00	

C. Resumé

Total number of projects: 25
Total construction cost: $4,544,137.87

D. Projects Deferred Indefinitely:

Engine No.	Location
3	1067 Post Street
8	1648 Pacific Avenue
16	909 Tennessee Street
17	416 Jessie Street
18	Wilde Avenue & Girard Street
19	4th & Merrimac Street
28	1814 Stockton Street
48	20th & Wisconsin Street

There are 12 projects for which financing has not yet been completed. These are estimated as follows:

7 houses (reconstruction)	$ 490,000.00
4 houses (new)	1,000,000.00
Property costs (estimated)	100,000.00
Total	$1,590,000.00

In addition to the above work, the Bureau completed preliminary studies for a new Fire Department Headquarters building estimated at $400,000.00, and expansion to the Training Facility located at 18th and Folsom Streets, estimated at $200,000.00, during the fiscal year. Engine 23, Clarendon Ave. and Olympia Way, estimated $250,000.00 and financed by budget appropriation, is in preliminary design stage.

II - 1954 Laguna Honda Home Bond Issue - $5,475,000.00

The extensive work of the Bond Issue is now completed. In all, a total of 20 projects were completed, six in the past fiscal year. They are:

1. Ward Building K	$330,085.00
2. Alterations to 2 elevators, Bldg. K	56,894.00
3. Ward Bldgs. E and F	440,750.00
4. Alterations to Confectionery	7,760.00
5. New Shelter - Incinerator	4,587.00
6. Flooring - Dining Rooms	975.00
Total	$841,051.00

The total bond issue was as follows:

Construction	$5,175,000.00
Equipment	300,000.00
Total	$5,475,000.00

In addition to the Bond work, approximately $2,000,000.00 of budget work (deferred maintenance) has been completed since the Bond Issue work began (fiscal years 1955-56 thru 1959-60), and approximately $300,000.00 of such work is scheduled for completion during fiscal year 1960-61.

III - 1954 San Francisco Hospital Bond Issue - $5,830,000.00

The design and construction work of this Bond Issue and related deferred maintenance work, progressed favorably during the fiscal year, but it is now evident that all jobs requested by the Hospital cannot be financed with funds available. The record of the various jobs is given below. Percentages are based on construction costs and estimated costs of jobs as shown, and the financing is from Bond Funds, Deferred Maintenance Funds, and Capital Improvement Funds.

Status July 1, 1960

A. Projects completed July 1, 1956 thru July 1, 1960 (60%)

	Job No.	Description	Const. Cost
1.	1335	Main Kitchen Dishwashing	$ 17,355.00
2.	1352	Elevators & Stair Enclosure (TB Bldg.)	104,406.00
3.	1366	Exit Stairways	131,316.00
4.	1382	Elevator Modernization (Wards 10-20-40)	62,372.00
5.	1384	New Incinerator	14,995.00
6.	1385	Garbage Can Wash. Facilities	3,972.00
7.	1387	Salvageable Refuse Storage	3,777.00
8.	1406	Bakery & Vegetable Prep. Room	62,007.00
9.	1409	Elevator Modernization (Ward 30)	24,912.55
10.	1439	Ventilating System	2,222.00
11.	1458	Laundry Roofing	4,744.00
12.	1473	X-Ray Developing Room	11,089.00
13.	1489	Roofing - Morgue Building	8,333.00
14.	1475	Weatherproofing	9,849.91
15.	1500	T.B. Modernization	419,221.81
16.	1437	Elevator Maternity Bldg.	61,346.00
17.	1563	Roofing Receiving Bldg.	2,791.00
18.	1381	Admitting Ward & Social Service	276,894.02

Job No.	Description	Const. Cost
19. 1444	Special Diet Laboratory	31,729.00
20. 1481	Elevator #90-A Modern. Bldg. 90	6,497.00
21. 1480R	Elevator #90-B Modern. Bldg. 90	4,289.24
22. 1421R	Exit Stairs Bldg. 80	91,606.17
23. 1425	Maternity Bldg.	820,887.10
24. 1438	Cold Storage Facilities	37,200.00
25. 1707	Curtain Cubicles & Track Instal.	1,145.00
26. 1701	Nurses' Call System	9,888.00
27. 1684	Corridor Doors - Maternity Bldg.	1,975.00
28. 1569	Passenger Elevator (New)	32,317.00
29. 1570	Lockers - Dressing Rooms	329,066.26
30. 1611	Cobalt Therapy Unit	35,865.51
31. 1652	Roofing & Parapets	32,387.00
32. 1521	Modernization - Bldg. 50	476,578.97
33. 1591	Corridors - Wards 30-40	287,420.00
34. 1952	Elevators - Wards 30-40	35,531.00
35. 1590	Ward Bldg. 40	455,753.00
36. 1735	New Main Electric Service	31,935.00
37. 1691	Psychiatry - Recreation Area	7,940.00
38. 1671	Isolation - New Elevator	78,589.00
	Subtotal	$4,030,202.54

B. Under Construction (32%)

Job No.	Description	Const. Cost
39. 1696	Consolidated Laboratories	$ 558,753.00
40. 1748	Ward Bldg. 10 & Corridors	924,629.00
41. 1921	Ward Bldg. 60	644,689.00
42. 1922	Elevator - Ward Bldg. 60	32,438.00
43. 1905	X-Omat Installation	4,883.00
	Subtotal	$2,165,392.00

C. Scheduled for Construction (8%)

Description	Estimate
*44. Morgue Building	$559,000.00

*This building was not originally intended to be financed by bond issue funds but, since budget funds are not available, and the condition of this building has created the administrative emergency at the Hospital, the balances remaining in the Bond Issue accounts are being appropriated to this project.

At the request of the Board of Supervisors, a complete report on the San Francisco Hospital Bond Issue, and a proposed new bond issue, was made on March 14, 1960 as follows:

1. BOND FUND APPROPRIATIONS (12/15/54, 6/18/56, 3/23/59, 3/14/60)

A. Project I Maternity and Psychiatry Buildings	$ 845,500.00
B. Project II Misc. Alterations & Service Buildings	932,500.00
C. Project III Ward Buildings 10-20-30-40	1,903,000.00
D. Project IV T.B. and Isolation Buildings	1,349,000.00
E. Contingent Fund	300,000.00
F. Equipment	500,000.00
Total	$5,830,000.00

2. DEFERRED MAINTENANCE APPROPRIATIONS

A. 1955-56	-	$ 410,500.00
B. 1956-57	-	390,500.00
C. 1957-58	-	333,600.00
D. 1958-59	-	429,905.00
E. 1959-60	-	474,117.00
	Total	$2,038,622.00

3. STATUS OF PROJECTS

Project I	Bond	Deferred Maintenance
A. Maternity Bldg.	Completed	Completed
B. Psychiatry Bldg.	Completed	Incomplete
Project II		
A. Ad. Wd. & Social Service	Completed	Completed
B. Incinerators	Completed	(none)
C. Locker Dr. Rms.	Completed	Completed
D. Diet Laboratory	Completed	(none)
E. Cold Storage Facilities	Completed	(none)
F. Misc. Alterations	Completed	Completed
*G. Electric Generator	Incomplete	(none)
*H. Bulk Oxygen Storage	Incomplete	(none)
*I . Revisions - Elect. Sw. Bds.	Incomplete	(none)
Project III		
A. Exit Stairs	Completed	(none)
B. Elevators	Completed	(none)
C. Ward Bldg. 40	Completed	Completed
D. Ward Bldg. 10	Under Construction	Under Construction
E. Ward Bldg. 20	Incomplete	Incomplete
F. Ward Bldg. 30	Incomplete	Incomplete
Project IV		
A. T.B. Bldg. 70	Completed	Complete
B. T.B. Bldg. 50	Completed	Complete
*C. T.B. Bldg. 60	Incomplete	Incomplete
D. Consol. Lab.	Under Construction	Under Construction

*To be financed from Bond and deferred maintenance funds currently available.

4. BOND WORK (which cannot be financed with currently available funds)

Incomplete Bond Work

A. Modernization, Ward Bldg. 20	$300,000.00	
B. Modernization, Ward Bldg. 30	300,000.00	
Subtotal		$600,000.00

Deferred Bond Work

A. Maintenance Shops	$ 6,500.00	
B. Parking Area (Isolation)	20,000.00	
C. Parking Area (Psychiatry)	20,000.00	
D. Administrative Offices	32,000.00	
E. Close-in Hospital Area	35,000.00	
F. Sorting Room (Laundry)	15,000.00	
G. Gatehouse & Personnel Office	52,000.00	
H. Relocate Nursing Office	32,000.00	
I. Lecture Room	90,000.00	
Subtotal		$320,500.00
TOTAL		$902,500.00

5. WORK INCLUDED IN 1960-61 BUDGET

	Capital Improvement	Deferred Maintenance
A. Modernization of Morgue	$288,000.00	*$175,000.00
B. Fence Repairs		* 45,000.00
C. Elevator Reconstruction		* 199,000.00
D. Miscellaneous Painting		* 21,000.00
E. Relocation of Chem. Laboratory	71,000.00	
F. Structural Work, Wards 20-30	*40,000.00	
G. Structural Work, Powerhouse	*18,000.00	
H. Structural Work, Isolation	*15,000.00	
I. Electric Generator	60,000.00	
J. Laundry Equipment	16,000.00	
K. Receiving Bldg. Elevator	18,000.00	
TOTALS	$526,000.00	$440,000.00

*Items approved

6. ADDITIONAL DEFERRED MAINTENANCE WORK NEEDED

A. Ward Bldg. 20	$ 230,000.00
B. Ward Bldg. 30	230,000.00
C. Psychiatry Building	353,000.00
D. Isolation Building	224,000.00
E. Nurses Home	220,000.00
F. Receiving and Stores	90,000.00
G. Administration Building	200,000.00
TOTAL	$1,547,000.00

7. ADDITIONAL NEW WORK REQUESTED (new Bond Issue)

A. New Psychiatry Building	$1,125,000.00
B. New Outpatient Department	150,000.00
C. New X-Ray Facilities	347,000.00
D. New Surgery (Operating) Facilities	1,600,000.00
E. New Library and Auditorium	540,000.00
F. Mission Health Center	150,000.00
G. New Message Center	35,000.00
H. Pneumatic Tube System	260,000.00
I. Married Residents' Quarters	1,627,000.00
J. Fire Alarm System	60,000.00
K. Administration Bldg. Modernization	280,000.00
Subtotal	$6,174,000.00
L. Incomplete Bond Work (Sec. III)	900,000.00
TOTAL	$7,074,000.00

IV - 1956 School Bond Issue - $27,000,000.00

The design and construction work of this Bond Issue, approved by the election of November 1956, progressed favorably during the past fiscal year. As of July 1, 1960 the various projects were in the following status:

A. Construction Completed (8%)

	Proj. No.	Name	Amount
1.	135	Star King School	$ 285,200.00
2.	105	John O'Connell H.S.	266,046.00
3.	119	Balboa H.S.	26,400.00
4.	121	H. Mann Jr. H.S.	88,712.00
5.	125	Silver Ave. Jr. H.S.	1,035,542.00
6.	124	G. Washington H.S.	107,612.00
7.	150	Polytechnic H.S. (Alterations)	35,374.00
8.	150	Polytechnic H.S. (Kitchen)	96,557.00
9.	150	Balboa H.S. (Athletic Field)	109,670.00
10.	130	Clarendon School (Grading)	4,380.00
11.	150	H. Mann Jr. H.S. (Alterations)	73,510.00
12.	150	H. Mann Jr. H.S. (Library)	46,697.00
13.	150	Roosevelt Jr. H.S. (Playyard)	50,478.00
14.	113	S.E. High School (Grading)	84,444.00
		Subtotal	$2,210,622.00

B. Under Construction (36%)

	Proj. No.	Name	Amount
15.	123	Portola Jr. H.S.	$ 463,500.00
16.	132	Longfellow School	844,000.00
17.	120	Francisco Jr. H.S.	578,000.00
18.	101	City College	2,245,600.00
19.	119	Lincoln H.S. (Athletic Field)	327,200.00
20.	122	Denman Jr. H.S.	455,183.00
21.	114	S.W. High School	4,081,150.00
22.	130	Clarendon H.S.	848,849.00
		Subtotal	$9,843,482.00

C. Final Drawings Under Preparation (32%)

23.	113	S.E. High School	$4,400,000.00
24.	132	J. Ortega School	525,000.00
25.	131	Golden Gate School	690,000.00
26.	120	Francisco Jr. H.S. (Yard)	50,000.00
27.	(none)	Reconstruction	3,000,000.00
		Subtotal	$8,665,000.00

D. Equipment (5-1/2%)	$1,500,000.00
E. Miscellaneous Costs & Contingencies Contingencies (14%)	$3,570,896.00
F. Unallocated (4-1/2%)	$1,210,000.00

TOTAL $27,000.000.00

From the above report it is obvious that excellent progress has been made on this Bond issue and that, barring unforeseen circumstances, all bond jobs will be completed within the money available. Actually, savings were made in Bond projects during the past two fiscal years since several projects were awarded for sums less than the estimated construction costs.

In addition to the Bond projects, the Jefferson School, destroyed by fire, was in design stage at an estimated cost of $815,000.00. This school is scheduled for completion and occupancy in September 1961, and is being financed from District funds and the fire loss insurance settlement. Another project, also to be financed from District funds, is the remodeling of the Administration Building, estimated to cost $1,200,000.00, for which a preliminary estimate has been prepared.

V. - 1956 Hall of Justice Bond Issue $19,475,000.00

Construction of the foundations of this structure, at a cost of $931,967.44, was completed in January 1959, and the principal building contracts, in total amount of $14,004,888.00, were certified immediately thereafter. One additional contract, the Service Station in total amount of $164,119.00, was awarded this year and the final construction contract, the Parking Lot, was scheduled for construction in November 1960. All work will be completed so that the building may be occupied in June of 1961. The Bureau also prepared lists for the complete equipping of the building during this fiscal year in total amount of $731,500.00, and bids are being taken by the City Purchaser. The status of Bond Issue as of July 1, 1960 was therefore as follows:

1. Construction Contract completed		$931,967.44	(5.5%)
2. Under Construction			
a. General Construction	$13,980,381.25		
b. Elevators	486,091.10		
c. Landscaping	30,500.00		
d. Service Station	164,119.00		
Subtotal		$14,661,091.35	
3. Scheduled Work (Parking Lot		100,000.00	(1%)
4. Equipment		734,127.00	(4.5%)
TOTAL		*$16,427,185.79	(100%)

* - Miscellaneous costs, fees, inspection and other administrative costs not shown.

General Description of Building:

Seven story and ground floor concrete structure with marble facing, and with an adjacent one story and roof deck parking structure, bounded by Seventh, Harriet, Bryant, and Harrison Streets.

Total Gross Sq. Ft. Area	571,145 sq. ft.
Parking (2 decks)	131,452 sq. ft.
Total Cubage	9,650,000 cu. ft.
Public Parking	131,000 sq. ft.

The building will provide space for the following City and County of San Francisco Departments and related facilities:

Roof	Helioport, Microwave Tower
Seventh Floor	County Jail
Sixth Floor	City Jail
Fifth Floor	Police Department
Fourth Floor	Police Department
Third Floor	Superior Criminal Courts, District Attorney, and allied departments
Second Floor	Municipal Criminal Courts, Adult Probation, and allied departments
First Floor	Municipal Traffic Courts, Traffic Fines Bureau, Police Traffic Bureau, Coroner's Department in adjacent one-story wing
Ground Floor	Police Department Locker Rooms, Property Storage, Maintenance Areas, Boiler Room, Cafeteria, etc.

Occupancy of Building:

Occupany of the new Hall of Justice is scheduled for June 1961, and will be as follows:

Occupants of Building	Cost (%)	Area (%)	Sq. Ft. Area
Police Department-City Prison	58.00	63.60	443,397
Criminal Courts (4 Municipal)	9.20	5.20	38,000
Criminal Courts (4 Superior)	6.50	5.30	38,500
Criminal Courts (3 Traffic)	6.70	7.30	54,000
District Attorney	4.10	4.30	30,500
Adult Probation	3.70	3.80	22,000
Public Defender	.85	.90	6,200
County Clerk (Criminal Division)	.45	.50	5,500
Coroner	2.80	2.60	18,500
Sheriff's Detention Jails	7.70	6.50	46,000
TOTALS	100.00	100.00	702,597

VI - 1958 Steinhart Aquarium Bond Issue $1,575,000.00

The work of this Bond Issue was divided into two parts, a new salt water pipeline from the beach to the Aquarium, and the rehabilitation of the Aquarium. Bids were received on the rehabilitation work on May 4, 1960 and reappropriation of funds was found to be necessary prior to award of contract. The final financial breakdown of the Bond Issue funds is as follows:

A. New Salt Water Pipeline

1. Construction	$135,000.00	
2. Engineering	20,500.00	
3. Consulting Engineer	9,200.00	
4. Inspection	6,000.00	
5. Unallocated	1,100.00	
Subtotal		$ 171,800.00

B. Rehabilitation of Aquarium

1. Construction	$1,227,711.00	
2. Inspection	12,900.00	
3. Preliminary Expenses	19,245.07	
4. Architects Fee	104,495.00	
5. Contingent Fund	33,669.22	
6. Miscellaneous Costs	5,000.00	
7. Unallocated	179.71	
Subtotal		$1,403,200.00
TOTAL		$1,575,000.00

It should be noted that some of the work originally intended to be completed in the Bond Issue will not now be a part of the work. The items listed below are not as urgent as the included work, but will probably have to be budgeted during the next few years.

1. Tanks in swamp area	$ 33,000.00
2. Shop under Main Vestibule	7,750.00
Subtotal	$ 40,750.00

In addition, $84,300.00 originally intended for main decoration is being used for construction.

The complete time schedule for the rehabilitation of the Aquarium is as follows:

1. Bonds voted	June 3, 1958
2. Funds appropriated	October 22, 1958
3. Architects appointed	January 15, 1959
4. Plans and specifications completed	February 15, 1960
5. Bids received	May 4, 1960
6. Reappropriation approved	August 26, 1960
7. Rehabilitation work to start	October 3, 1960
8. Phase I completion (11 months)	September 1, 1961
9. Phase II completion (7 months)	March 1, 1962

Since the installation of the new salt water pipeline is a much smaller job, it can be finished long before the rehabilitation of the Aquarium.

VII - 1959 Civic Auditorium Bond Issue $7,575,000.00

The Bond Issue was approved by the Finance Committee of the Board of Supervisors in June 1959, and upon the recommendation of the Mayor's Bond Screening Committee the amount was reduced by $200,000.00 which had been previously approved for restorative work at the Auditorium in the 1959-60 Budget. The amount of this bond issue, approved on the November 3, 1959 ballot, is therefore $7,575,000.00

The Civic Auditorium, which is San Francisco's principal convention facility, is obsolescent. Built in 1914 it has not been modernized and maintenance has not been adequate. While other cities such as Detroit, Los Angeles, Miami, Portland and Las Vegas have completed or are building new convention buildings, San Francisco does not have the space to do likewise. It is also impractical since the location of a new convention building would have to be in the same location as the Civic Auditorium, and the wrecking of the existing building and the building of a new structure would take at least two years, during which time the convention business, for all practical purposes, would be lost. It is therefore essential that the Civic Auditorium which is basically sound both in plan and construction, be completely rehabilitated and modernized so that it can successfully compete with new buildings in other cities.

The "Survey of Convention Facilities Needs in San Francisco" prepared by the Industrial Planning Associates, established requirements which must be met in the modernization and rehabilitation work as a part of an organized program to increase San Francisco's share of the convention business from $30,000,000.00 in 1957 to $72,000,000.00 in 1980. These requirements are as follows:

1. Rehabilitation of the Main Arena, Polk and Larkin Halls, to serve in the dual capacity of large meeting rooms and exhibit space

2. Provide 60 small meeting rooms, seating from 40 to 250

3. Improve the vertical transportation

4. Replace the obsolete electrical, plumbing, and mechanical systems, provide modern heating, lighting, plumbing and air conditioning systems

The Bureau's report revised April 15, 1959, describes in detail the work which will be done to achieve these ends. An estimate of cost and an interruptible construction schedule which will provide for completion of the work during periods of non-use of the Auditorium between scheduled conventions and special events. The total estimated cost of this Bond Issue was $7,775,000.00. The basic requirements and provisions made to provide for them are listed below:

1. The restoration of the Main Arena and Polk and Larkin Halls to serve as both large theatre-type meeting rooms and as exhibit space. While at present these rooms do serve in this dual capacity, their finishes are shabby and obsolete. The ceiling of the original arena is worn out and has been removed, an awning type ceiling installed as a temporary expedient. The acoustics in these three big meeting rooms are poor. The estimate provides for all of the above corrective work plus new seats for Polk and Larkin Halls.

2. Sixty meeting rooms seating from 40 to 250, a total of approximately 5,000. The Auditorium now has 16 meeting rooms, seating from 30 to 150. The estimate provides 64 meeting rooms seating a total of about 5,200.

3. The improvement of vertical transportation throughout the building. The Auditorium now has satisfactory stairs but only two obsolete passenger elevators. The consultants made a thorough study of this requirement and found that the best solution was escalators connecting every floor of the building, first through fourth, one new elevator, and renewing the other elevators.

4. General renovation of the building.
   The mechanical system is obsolete and the electrical system is illegal, overloaded, and dangerous. The estimate includes a modern mechanical system, with proper heating, ventilating, and air conditioning, and a modern electrical and lighting system. It also includes the renovation of all corridors, miscellaneous rooms, toilets, and the basement. By far the greatest single expense is the new mechanical system which amounts to about one-third of the entire work.

The appropriations which were approved by the Board of Supervisors on January 30, 1960 were as follows:

1. Construction	$6,700,000.00
2. Architect-Engineer fee	528,000.00
3. Department of Public Works costs	227,000.00
4. Equipment	120,000.00
Total	$7,575,000.00

The time for the work was established as follows:

1. Architect-Engineer Contract certified	March 7, 1960
2. Prepared Program, 1 month	April 7, 1960
3. Review and approvals	May 26, 1960
4. Prepare preliminary drawings (4 mos.)	Sept. 26, 1960
5. Review and approvals	Oct. 1, 1960
6. Prepare working drawings (9 mos.)	July 1, 1961
7. Approvals - Advertise for bids	July 15, 1961
8. Bids to be received	Sept. 1, 1961
9. Contract to be awarded	Sept. 7, 1961
10 Contract to be certified	Oct. 1, 1961

11. The construction time is indeterminate at present, and depends on the number and length of interruptions which occur during construction.

VIII - 1959 Palace of Fine Arts Bond Issue $1,800,000.00

This Bond Issue which is intended for conversion of the Palace of Fine Arts, was approved by the election of November 3, 1959. It will be used in conjunction with $2,000,000.00 provided by the State and $2,000,000.00 provided from private sources, intended for restoration of the Palace of Fine Arts. The entire job is therefore $5,800,000.00 and will include both conversion and rehabilitation.

The exterior of the building, colonnade, and rotunda will be restored to its original form as nearly as possible, using permanent materials. The interior of the large curved hall, comprising approximately 110,000 square feet, will be converted to house the following:

1. Administrative Offices
2. Studios
3. Theatre including stage
4. Restaurant and kitchen
5. Exhibit space
6. Music Hall and stage

The estimate was prepared by, and the bonds voted to, the Recreation and Park Commission. Subsequently the Commission requested that the work be undertaken by the Department of Public Works, and the transfer was effected in June 1960.

Inasmuch as the State of California is committed to provide $2,000,000.00 towards the work it has been necessary to obtain an agreement between the City and State for handling our joint funds. The City Attorney has advised that he expects approval of the agreement soon. The agreement is contingent upon the closing of certain streets at the site, which action will be legally completed in September 1960.

These streets were owned by the Federal Government and an act of Congress was required to obtain their release to the City. This act was signed by President Eisenhower in June 1960.

Although some preliminary work has been done on the planning, it is not possible to enter into a contract for the architectural design until the agreement with the State is completed. The planning should take from 12 to 14 months to complete. We can then go out for bids on the work probably in November or December of 1961. The construction work will take about 18 months bringing the completion date some time around May or June 1963.

The financial breakdown for this project is as follows:

1. Total Funds

a. From State	$2,000,000.00
b. From private sources	2,000,000.00
c. 1959 Bond Issue	1,800,000.00
Subtotal	$5,800,000.00
d. State costs (deduct)	50,000.00
e. Total available	$5,750,000.00

2. Allocation of $5,750,000.00

a. Construction Basis of Architects contract	$4,753,000.00	
b. Contingency of 10% List of Construction contract (not including extras during construction)	$ 475,000.00	
c. Total Construction		$5,228,000.00
d. Inspection and Testing during construction		52,280.00
e. Architects and Engineers fees Basis of certification 6% of $4,753,000.00	$ 285,180.00	
f. Additional fee (but not to exceed 10% of certified contract)	$ 28,518.00	
g. Total fee		$ 313,698.00
h. Other possible Professional Services 1. Landscape Architect 2. Mural Painter 3. Sculptor Allowance for above		$ 10,000.00
i. Public Works Costs		
1. Preliminary phases, Programming, conferences, blueprinting, checking drawings. Estimate	$8,000.00	
2. Borings, surveys, soil investigation, blueprints, etc. Est.	9,000.00	
3. Final working drawings, checking plans and estimate, typing specifications, blueprinting of final documents. Estimate	10,000.00	
4. Clerical work during construction period; blueprints and miscellaneous services. Estimate	$ 3,000.00	
Total		$ 30,000.00
j. Miscellaneous Costs 1. Advertising 2. Legal costs, etc. Allowance		$ 5,000.00
k. Reserve for Contingency Possible extras during construction Allowance	100,000.00	
Balance	11,022.00	
		$ 111,022.00

3. Resumé

Construction	$5,228,000.00	
Inspection	52,280.00	.01
Architects fees	313,698.00	.06
Other possible professional services	10,000.00	.002
Public Works costs	30,000.00	.0057
Miscellaneous costs	5,000.00	.001
Reserve for contingency	111,022.00	.021
Total allocation	$5,750,000.00	.0997
State allowance	50,000.00	
Total Fund	$5,800,000.00	

IX - 1960 de Young Museum Bond Issue $2,725,500.00

This Bond Issue was approved by the electorate in June 1960. It was a Recreation and Park Bond issue and the estimate was prepared by a private architect. The purpose of the Bond Issue is to provide a new West Wing for de Young Museum in which an Oriental Art collection will be housed. This art collection is bepresented to the City by Mr. Avery Brundage contingent upon the City's providing a suitable building for its storage and display.

The estimate which formed the basis for this bond Issue is as follows:

1960 Recreation and Park Bond Issue

a. Construction estimate 1962 prices		$2,288,832.00
b. Architects and Engineers fee		160,218.00
c. Exhibit cases	$240,000.00	
Architectural fee	16,800.00	256,800.00
d. Soil borings		4,500.00
e. Full time Inspection		10,000.00
f. Office furniture		4,650.00
	Total	$2,725,000.00

Note: Relocation of present exhibits and remodeling of
space on east side estimated at $182,000.00
was not included in above estimates.

On June 15, 1960 the Board of Trustees requested the Director of Public Works to handle this project, and recommended to the Director that Gardner Dailey, Architect, be engaged to prepare the drawings and specifications for the work. Subsequently, however, the Director was requested to delay the start of the work pending Mr. Brundage's return to this country.

The appropriations of this Bond Issue, which will be requested as soon as the preliminary details are settled, has been tentatively determined as follows:

A. Public Works costs		
1. Administrative cost Conferences, checking prelim. drawings, prelim. estimates, and mechanical and electrical; blueprinting	$3,000.00	
2. Boring surveys, soil investigation	4,500.00	
3. Checking final drawings, specifications and estimate, reviewing by Mech. & Elec. Sections, typing specifications, blueprinting, advertising and awarding contract	6,500.00	
Subtotal		$ 14,000.00
B. Consultants Contract		
1. Allowance, Basis of Contract 7% of construction cost of $2,000,000. or	$ 140,000.00	
2. Contingency: 7% of $200,000	14,000.00	
3. Consultants	14,000.00	
4. Fee for Exhibit Cases 7% of $200,000. or	14,000.00	
Subtotal		$ 182,000.00
C. Construction		
1. Allowance: Basis of Architect's Contract	$2,000,000.00	
2. 10% contingency for overrun estimates and extras during construction	200,000.00	

3. Exhibit cases Separate contract from Construction contract	200,000.00	
Subtotal		$2,400,000.00
D. Inspection and Testing		24,000.00
E. Equipment and Furniture		4,650.00
F. Miscellaneous Costs		
1. Advertising for bids		4,000.00
G. Reserve for Contingency		
1. Construction	$ 87,500.00	
2. Other costs	8,850.00	
Subtotal		$ 96,350.00
	TOTAL	$2,725,000.00

Resume

A. Public Works Costs	$ 14,000.00
B. Consultants Contract	182,000.00
C. Construction	2,400,000.00
D. Inspection and Testing	24,000.00
E. Equipment and Furniture	4,650.00
F. Miscellaneous Costs	4,000.00
G. Reserve for Contingency	96,350.00
TOTAL	$2,725,000.00
(a) Total Construction Cost including reserve	$2,487,500.00
(b) All other costs including contingency exclusive of construction reserve	237,500.00
TOTAL	$2,725,000.00

X - Proposed Bond Issue	$2,500,000.00

New Building - Public Welfare Department

The Director of Public Welfare in February 1960 requested assistance in the selection of a site and the preparation of an estimate for a new building. Of the possible sites near the Civic Center, the block bounded by Gough, Rose, Octavia, and Page Streets was determined to be the best, and the cost of the building was determined to be $21.00 per sq.ft. The final estimate given to the Director was as follows:

1. Construction 80,000 sq. ft. at $21.00	$1,680,000.00
2. Plans, specifications and miscellaneous costs (10%)	168,000.00
3. Inspection and related costs	20,000.00
4. Contingent Fund	132,000.00
5. Land and Equipment	500,000.00
TOTAL	$2,500,000.00

XI - Proposed Bond Issue - New Civil Courts Building and Remodeling of City Hall $22,150,000.00

During the spring of 1957 the Bureau, working in close cooperation with the architects for the Civic Center Development Plan, the advocates of a new Courts Building, and the Municipal Conference, prepared estimates for this proposed work. The bond issue is based on the report of the Architects and Engineers for the San Francisco Civic Center Development Plan, dated May 7, 1957. In their survey of existing conditions at the Civic Center, the consultants found that:

> "Facilities which are now provided in the Civic Center have become over-crowded requiring the use of temporary structures and rental properties. In many cases, offices are scattered and no provision for expansion is available. The present permanent spaces have become largely outmoded. It is essential that additional space be provided and that existing space be rehabilitated to provide efficient up-to-date accommodations that are suitable for the functions to be housed in them."

As a solution to the space problems the Consultants recommended:

1. The construction of a new Civil Courts Building on Marshall Square to house the Municipal and Superior Courts, and all their attendant facilities, at an estimated cost of $16,207,254.00.

2. The remodeling of the City Hall to provide office space for the Mayor, Chief Administrative Officer, Board of Supervisors, and the majority of the City and County Departments at an estimated cost of $7,918,462.00.

3. The future construction of an Annex Office Building across McAllister Street from the City Hall in the block bounded by McAllister, Van Ness, Polk, and Redwood Streets. This building would be needed in the future but since it was not urgently required at present its construction should be deferred until a later date.

The total amount of the Bond Issue recommended by the Consultans is as follows:

1. New Civil Courts Building		$16,207,254.00
2. Remodeling of City Hall		7,918,462.00
	TOTAL	$24,125,716.00

This amount was later modified in conferences with interested citizens and public officials by the reduction of facilities and space as follows:

1. New Civil Courts Building		$14,379,450.00
2. Remodeling of City Hall		7,770,550.00
	TOTAL	$22,150,000.00

The Bond Issue was approved by the Mayor's Bond Screening Committee June 3, 1957, the Finance Committee on June 5, 1957, and by the Board of Supervisors on June 10, 1957. The Bond Issue was defeated in the November 1959 and 1958 elections by narrow margins, and will not be on the November 1960 ballot. It will, however, probably be revived at a later date after other facilities which are more urgently needed have been provided.

XII - Proposed Bond Issue - Public Library $5,190,155.00

Data was prepared for this Bond Issue which includes rehabilitation and additions to the Main Library building and nine new branch libraries, in time so that it could be presented on the November 1957 ballot. However, it did not receive the support of the Mayor and downtown organization and was therefore not on this ballot. It will probably be revived at a later date after a complete survey of the Library facilities which is now in progress.

PERSONNEL

The total permanent allowance of personnel in the Bureau remained at 61, but because of retirements, etc., six permanent positions were not filled. Requisitions are in for all permanent positions, however, and as soon as lists are established they will be filled. Because of the lack of lists and the great amount of school vacation jobs this summer, it was necessary to employ 15 temporary employees. The total employees as of June 30, 1960 were 70.

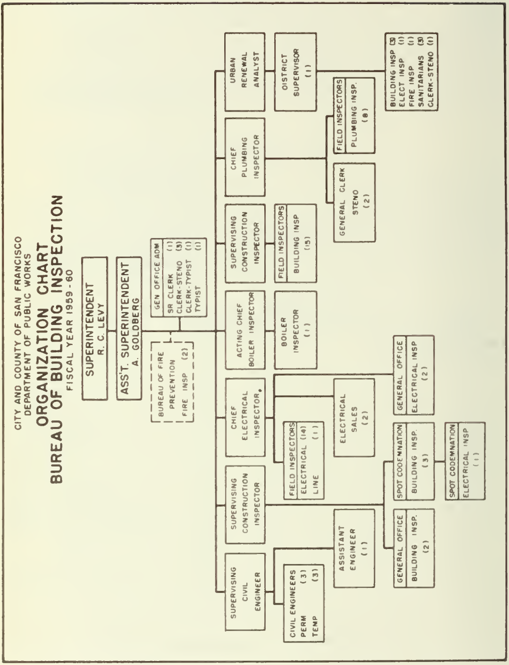
	30 June 1959		30 June 1960		Change	
	Perm.	Temp.	Perm.	Temp.	Perm.	Temp.
City Architect	1	0	1	0	0	0
Asst. City Architect	1	0	1	0	0	0
Architects	10	0	9	0	- 1	0
Sr. Arch. Draftsmen	9	0	10	0	+ 1	0
Arch. Draftsmen	8	1	9	1	+ 1	0
Jr. Draftsmen	1	0	1	0	0	0
Office Assistant	1	0	1	0	0	0
General Clerk	1	0	1	0	0	0
Sr. Clerk	1	0	1	0	0	0
Gen. Clerk Steno.	4	1	2	2	- 2	+ 1
Gen. Clerk Typist	3	1	2	2	- 1	+ 1
Super. Const. Inspector	2	0	2	0	0	0
Building Inspector	13	14	15	10	- 2	0
TOTAL	55	17	55	15	- 4	+ 2

Total Personnel 70

The Bureau's personnel is divided into four groups according to location. The duties performed by these groups are briefly described below:

Personnel	Group	Location	Activities
6	1	Room 265 City Hall	Administrative Conferences, Assembly of Plans and Specifications for bidding, General Files
3	2	Room 252 City Hall	Estimates, Preliminary Design Program and Budget Section, Analysis of Construction
31	3	45 Hyde Street	General Drafting Room, Specifications, Drawings, Research, Checking and Report Section
30	4	Room 250 and in the Field	Field Inspection

Total Personnel - 70



CITY AND COUNTY OF SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS

ORGANIZATION CHART
BUREAU OF BUILDING INSPECTION

FISCAL YEAR 1959 - 60

BUREAU OF BUILDING INSPECTION

Robert C. Levy, Superintendent

FUNCTIONS

For the purpose of ensuring compliance with City Building, Housing, Plumbing, and Electrical Codes, the State Housing Act and other State laws, the Bureau of Building Inspection reviews, plans and inspects construction and installations involving structural, electrical, plumbing and mechanical work throughout the city. It also studies and reports on legislation affecting buildings and structures, and proposes new legislation affecting buildings and structures, and proposes new legislation as required and is the enforcing agency for the City Planning Code.

ORGANIZATION

The Bureau of Building Inspection has six field inspection divisions:

Building Inspection
Plumbing Inspection
Electrical Inspection
Boiler Inspection
Urban Renewal
Spot Condemnation

In addition there is the Plan Checking and Structural Engineers division which review all new construction plans for code compliance structural adequacy.

For detailed descriptions of the functions and organization of each of the divisions, reference is made to the 1958-59 annual report.

In November, 1959, the position of Superintendent, which was unfilled since April, 1959 after the retirement of Lester Bush, was filled. Also the position of Assistant Superintendent, previously reclassified from Senior Civil Engineer, was filled in December, 1959. The filling of these positions on a permanent basis has allowed for better administrative control of the Bureau.

URBAN RENEWAL PROGRAM

The Urban Renewal Program includes within its activities the work of the Urban Renewal Division and the Spot Condemnation units of the Bureau. The Urban Renewal Division works through designated area-wide studies and planned area inspections, while the Spot Condemnation unit works City-wide via complaints and "spot" investigations.

The designated areas in which the Urban Renewal Division works, are recommended by the Director of the Department of City Planning, and designated by the Chief Administrative Officer. All residential buildings within such designated areas are inspected and a notice sent to the owner detailing the work required to bring the building into conformity with the codes.

During the early part of the year, the field work for the feasibility study was completed and procedural studies for actual code enforcement work in a Conservation Area were made. Conferences were held with the Bureau of Fire Prevention and Public Safety, and the Department of Public Health, to define responsibility and determine standards of inspection to apply to existing buildings. It was decided that the Urban Renewal Inspectors, together with Fire Inspectors, would handle all inspection work, and the actual permit inspections would be done by the building inspectors assigned to the Urban Renewal Division.

The first Conservation Area was in Pacific Heights and work of the Division started in December, 1959. During the fiscal year, two areas were designated and inspection work under study were under way in four other areas to determine their suitability for this type program.

SUMMARY OF CONSERVATION PROGRAM - URBAN RENEWAL DIVISION
December 1, 1959 - June 30, 1960

	Area I	Area II	Total For Year
Total Number of Buildings in Area	146	151	297
Total Number of Buildings inspected	146	139	285
Permit Applications Filed	28	6	34

The report on the feasibility of rehabilitating residential structrues was completed and published during the year. This report showed that in most cases, rehabilitation of the structure was economically sound.

The spot Condemnation Division inspects all types of buildings for compliance with existing codes and operates in the areas of the city outside of the Conservation and Rehabilitation Areas. The program has been in effect in the Bureau of Building Inspection for about six years.

SUMMARY OF SPOT CONDEMNATION INVESTIGATIONS

	1958-59	1959-60
Number of Buildings Investigated	310	287
Number of Buildings Demolished	81	86
Number of Buildings Restored	61	72

Citizens Participation

The staff of the Division attended meetings of the Citizens Participation Committee for Urban Renewal, and in addition, attended many neighborhood and community organization meetings to explain and provide information concerning the Urban Renewal Program.

Housing Appeals Board

The Housing Appeals Board heard 20 appeals for the condemnation orders of the Director of Public Works and the Director of Public Health. This board, created last year, comprises five persons appointed by the Chief Administrative Officer, and in addition, the Director of the Department of City Planning and the Associate Urban Renewal Coordinator serve as ex-officio members without vote, and the Urban Renewal Analyst acts as Secretary of the Board.

Plans For the Future

It is expected that during the next year, additional Conservation Areas will be declared within the Pacific Heights area bounded by Van Ness Avenue, Presidio Avenue, California Street and Broadway. Also, preliminary studies are underway in cooperation with the Department of City Planning concerning the advisability of recommending an area composed of multi-family structures. We have encountered difficulties in securing efficient operation with both building inspectors and sanitarians, and we hope to complete a study shortly as to the most efficient type of staff to handle this operation. Our investigation of similar divisions of other cities shows no consistent pattern, each city having a somewhat different type of organization.

While our small staff of eleven in the planned area part of our urban renewal division is satisfactory for initiating a planned area program, to allow greater flexibility in experimenting to improve efficiency, it is far too small a staff to effectively inspect and bring up to code standards the many neighborhoods requiring either a conservation or rehabilitation approach within a reasonable time. In future years, budget requests will be initiated to increase the staff to a size to cover the deficient areas within a 20 or 25 year period.

REPORT OF RESIDENTIAL RECORD

In December, 1959, an ordinance was introduced in the Board of Supervisors requiring that before a residential building could be sold, a report must be obtained by the owner and delivered to the buyer. This report would indicate the zoning, original use, present legal occupancy and other pertinent information to be obtained from the legal records of the City and not from inspection. From this report, the prospective buyer could determine the legality of the building. There were protracted hearings and modifications which included provisions for a waiver in case the buyer did not care to receive a report, and provisions for a physical inspection of the premises upon voluntary application of the owner and payment of $35 per habitable story for the service.

This ordinance was passed March 21, 1960 with the effective date of July 1, 1960. It was not possible to secure and train the necessary personnel, nor establish the necessary administrative procedures within that short period. The effective date was postponed by action of the Board of Supervisors until December 1, 1960 and work is now underway to establish the division prior to that date.

STATISTICAL SUMMARY
Building Inspection Division

Type of Construction	1958-59 No. of Permits	Est. Cost	1959-60 No. of Permits	Est. Cost
1A	20	$25,346,546	18	$ 16,166,497
1B	4	8,633,000	10	30,846,857
2	1	240,000	-	-
3	28	2,615,323	27	3,420,351
4	20	1,361,250	24	727,045
5	1,146	28,203,405	1,025	37,101,047
Alterations	10,395	25,818,298	10,190	32,369,759
Totals	11,614	$92,717,822	11,294	$120,631,556

Type 1A - Steel frame with reinforced concrete walls and floors.
Fire-resistive construction.

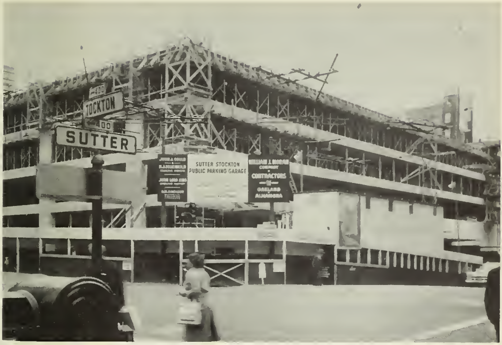
Type 1B -	Built entirely of reinforced concrete. Fire-resistive construction.
Type 2 -	Similar to Type 1, but with limitations.
Type 3 -	Wood frame floors with exterior walls of masonry. Ordinary masonry construction.
Type 4 -	Light incombustible frame construction.
Type 5 -	Woodframe construction.

BUREAU STATISTICS FOR FISCAL YEAR

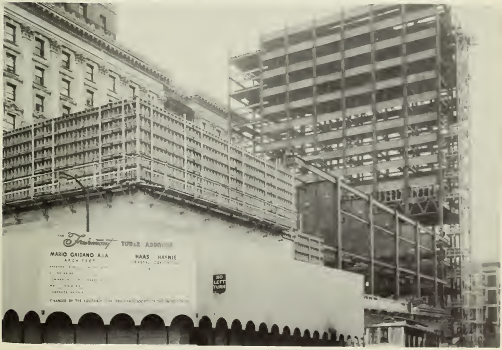
BUILDING INSPECTION DIVISION:	1958-59	1959-60
Inspections reported by inspectors of buildings	53,052	54,888
Projects remaining on which permits have been issued that have not been reported completed by inspectors of buildings	4,490	4,565
Complaints that have been reported adjusted by inspectors of buildings	4,359	4,141
Inspections reported by inspectors of boilers	897	1,339
Complaints and requests for information recorded	266	211
Applications for permits examined by and approved by structural engineers	3,881	3,949
Applications for permits examined and approved by plan checker	1,347	1,376
Miles traveled during the year by 41 passenger cars on inspection service	281,454	307,210
ELECTRICAL INSPECTION DIVISION:		
Permits issued, wiring, fixtures, signs	17,248	17,115
Inspections made	55,461	56,490
Complaints investigated (found defective)	4,639	4,595
Installations uncovered that were not with the department ("sneaked-in jobs")	2,550	2,705
Installations in progress as of June 30, 1959	4,936	5,408
Installations completed	17,186	16,826
Pin ball machine inspections	740	520
Juke box inspections	76	60
Electrical sales inspections	3,146	3,996
Overhead line inspections	4,757	4,224

PLUMBING INSPECTION DIVISION:	1958-59	1959-60
Plumbing permits issued	4,114	6,665
Water permits issued	3,332	511*
Gas piping and appliance permits (A and C series)	9,075	8,980
Gas permits on plumbing	5,853	5,816
Plumbing inspections made	11,765	12,969
Water inspections made	8,934	2,690
Plumbing complaints investigated	705	2,354
Gas piping complaints investigated	4	8
Gas appliance complaints investigated	94	266
Plumbing installations completed	3,340	3,968
Gas lines inspected final	3,365	4,116
Gas appliances approved	9,314	10,085

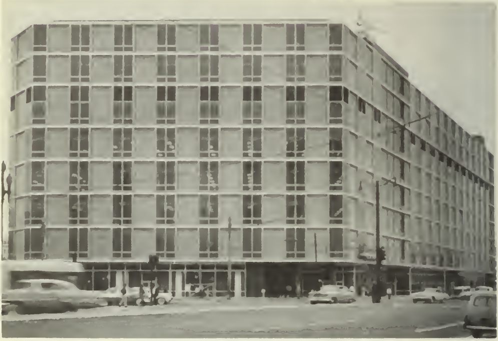
*Water permits combined with plumbing - 2924.



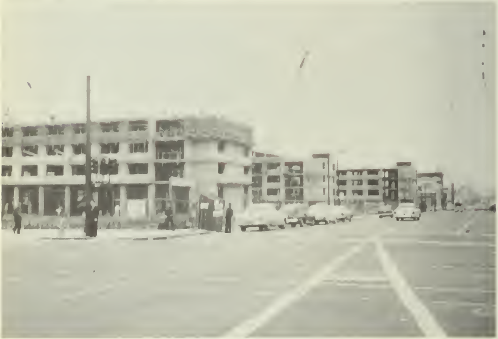
SUTTER-STOCKTON GARAGE
Northeast corner of Sutter and Stockton Streets



FAIRMONT TOWERS
Addition to Fairmont Hotel, northwest corner of California and Powell Streets



BANK OF AMERICA SERVICE CENTER
Southeast corner, South Van Ness Avenue and Market Street



DEL WEBB TOWNE HOUSE
Southeast corner, Market and Eighth Streets

ORGANIZATIONAL RELATIONSHIPS

MAINTENANCE, REPAIR & OPERATION

1959-60

DIRECTOR
Reuben H. Owens

Ass't. Director for Maintenance & Operation
Lawrence J. Archer

BUREAU OF SEWER REPAIR & SEWAGE TREATMENT

W. B. Jones, Superintendent

Functions

1 Maintain and Repair Sewerage System.
2 Operate and Maintain 14 Sewage Pump Stations.
3 Operate and Maintain 3 Sewage Treatment Plants.
4 Control Industrial Waste Discharge to Sewers.
5 Conduct Air and Water Pollution Surveys.
6 Provide Advisory Service to other City Departments on Sewage Treatment.

Personnel Allowance	
(a) Budgeted	247
(b) Assigned from Other Bureaus and Departments	11
(c) Contract employees on hired trucks	5
Total	263

Total Expenditure	
Budgeted by Bureau	$2,208,990

BUREAU OF STREET REPAIR

F. D. Brown, Superintendent

Functions

1 Maintain and Repair Public Streets.
2 Operate and Maintain 3 Lift Bridges.
3 Operate and Maintain Asphalt Plant.
4 Operate Granite Curb Yard.
5 Operate and Maintain Broadway Tunnel.
6 Remove Earth Slide Deposits from Street Areas.
7 Maintain and Repair Certain Street Structures.
8 Perform Work for Other Bureaus and Departments by Work Order.

Personnel Allowance	
(a) Budgeted	172
(b) Assigned from Other Bureaus	1
(c) Contract employee on hired truck	1
Total	174

Total Expenditure	
Budgeted by Bureau	$1,776,606

BUREAU OF BUILDING REPAIR

A. H. Ekenberg, Superintendent

Functions

1 Maintain and Repair Certain Public Buildings.
2 Provide Maintenance and Repair Services and Personnel on an Interdepartmental Basis to other City Agencies.
3 Provide Operating and Custodian Personnel in Certain Public Buildings.
4 Conduct Engineering-Architectural Surveys and Prepare Reports on Certain Public Buildings.
5 Paint Street Traffic Striping and Markings.
6 Repair Certain Street Structures and Sidewalks fronting on City Property.
7 Maintain Street-Name Signs.

Personnel Allowance	
(a) Budgeted by Bureau	344
(b) Assigned from Other Bureaus	2
Total	346

Total Expenditure	
Budgeted by Bureau	$3,353,028
Funds from Other Sources	807,243
	$4,160,271

BUREAU OF STREET CLEANING & PLANTING

B. M. Crotty, Superintendent

Functions

1 Clean Public Street Surfaces.
2 Clean 5 Pedestrian Underpasses.
3 Clean 2 Pedestrian-Vehicular Tunnels.
4 Clean 4 Pedestrian-Vehicular Underpasses.
5 Plant and Maintain Street Trees, Shrubbery and Ground Cover.

Personnel Allowance	
(a) Budgeted by Bureau	354
(b) Assigned from Other Bureaus	3
Total	357

Total Expenditure	
Budgeted by Bureau	$2,477,571

SUMMARY

Total Personnel Allowance........................	1140
Total Expenditures, less reimbursements............	$10,623,438

MAINTENANCE AND OPERATION

Lawrence J. Archer, Assistant Director of Public Works

General

The maintenance and operation activities of the department function through the Bureaus of Building Repair, Sewer Repair and Sewage Treatment, Street Repair and Street Cleaning. These bureaus are administered through the Assistant Director, Maintenance and Operation. The work-load of the bureaus continued at about the same level as during the previous year except that the maintenance and repair of the physical plant of the new "Giants" baseball stadium at Candlestick Park was assigned to the bureaus for performance under work order procedure. This stadium and parking area was constructed at a cost of about 11 million dollars as a project of the San Francisco Park and Recreation Commission. Total ground area is 77.36 acres exclusive of 8.29 acres of street areas temporarily in use as part of the parking area. Seating capacity of stadium is 45,000, including about 2500 in temporary center field bleachers. The parking area accommodates about 8200 passenger cars and 300 chartered buses.

Also, the Bureau of Sewer Repair and Sewage Treatment prepared to take over the operation, maintenance and repair of the new 4th Street Sewage Pumping Plant scheduled about August 1960 and the Bureau of Building Repair prepared to take over the maintenance, repair and operation of the new Hall of Justice scheduled about July 1961.

Appropriations continue to be insufficient for proper maintenance and repair of public buildings and operating equipment. In some cases, shortages cause work to be performed on an intermediate breakdown basis rather than by rational planning. This, too frequently, results in postponement of correction action until advanced deterioration requires major repairs.

The rapidly shrinking dump site areas invite early consideration of other sites or means for disposing of waste materials. Legislative action toward relocating the bulkhead line in the southeastern part of the City to a parallel line a considerable distance easterly of the present line could make present tidelands available for disposal of wastes and land reclamation.

Rainfall has considerable bearing upon the extent and nature of field operations during winter months. The annual rainfall for San Francisco as recorded by the Federal Bureau from June 30, 1959 to July 1, 1960 amounted to 15.47 inches as compared to a rainfall of 10.46 inches in 1958-59 and a norm of 20.51 inches.

Bureau Responsibilities

In general, the bureaus are responsible for the:

1. Maintenance and repair of:

   (a) 316 public buildings
   (b) 813 miles of streets (except contract work under the City Engineer)
   (c) 850 miles of sewer systems with about 21,500 manholes and 25,000 catchbasins
   (d) Street name signs for 2011 streets of different names
   (e) Sidewalks fronting on public property

2. Operation of:

   (a) 31 of the above public buildings
   (b) 3 sewage treatment plants with a total average dry weather treatment capacity of about 110 m.g.d.
   (c) 14 sewage pumping stations with a combined pumping capacity of about 11.16 m.g.d.
   (d) 1 municipal asphalt plant with an output capacity of 90 tons per hour
   (e) 1 Vehicular-pedestrian twin tube tunnel; each tube being about 1616 feet in length
   (f) 1 Stone Curb Yard
   (g) 3 Lift bridges over navigable waters

3. Cleaning of:

   (a) 1690 Curb-miles of streets
   (b) 3 Monuments in street areas
   (c) 2 Vehicular-pedestrian tunnels
   (d) 5 Pedestrian underpasses
   (e) 4 Vehicular-pedestrian underpasses

4. Painting of:

   (a) Street traffic stripes

5. Maintenance of:

   (a) 88 acres of landscaped areas and parkways; including about 6300 street trees
   (b) 1 City-controlled dump

In addition to the above responsibilities, the bureaus perform services for other City departments and governmental agencies under work order procedure. Except for several City facilities in San Mateo County, services are performed within the confines of the City and County.

Personnel

Personnel allowances as budgeted by the respective bureaus totalled 1117 as compared to 1115 in 1958-59 and 1097 allowed for 1960-61. In addition 17 employees from other bureaus and 6 contract employees on hired trucks are assigned to direction under the maintenance and operations bureaus.

Expenditures

Expenditures of maintenance and operation bureaus amounted to \$9,816,195 from budgeted appropriations and \$807,243 from funds received by work order; or a total of \$10,623,438.

This total expenditure represents a per capita cost of \$14.85, based on a population of 715,609 recorded by Federal census in 1960.

Equipment

The bureaus have an assembly of 196 automotive vehicles and 145 units of specialized portable equipment, exclusive of 11 rented and hired vehicles.

BUREAU OF SEWER REPAIR AND SEWAGE TREATMENT

W. B. Jones, Superintendent

The Bureau of Sewer Repair and Sewage Treatment is divided into 3 divisions: Sewer Repair, Sewage and Waste Treatment and Sewage Pumping. The Sewer Repair Division maintains and repairs public sewers and appurtenant structures and services mosquito complaints originating in drainage catch basins. The Sewage and Waste Treatment Division operates and maintains three primary sewage treatment plants, conducts sanitary surveys of shore waters, regulates and controls industrial wastes discharges to sewers, analyzes air samples of pollutants and advises other City departments on the maintenance and operation of their sewage treatment facilities. The Sewage Pumping division operates and maintains 14 sewage pumping stations.

Budgeted employments for the fiscal year were 106 for Sewage Treatment, 13 for Sewage Pumping and 128 for Sewer Repair, totalling 247. These employments were supplemented by one Junior Engineer and one Clerk-Typist for Sewer Repair and 9 maintenance personnel for Sewage Treatment, all from other bureaus and departments and 5 chauffeurs hired with their truck on a contractual basis by Sewer Repair.

Of the 128 budgeted employees in the Sewer Repair Division, 20 are authorized to perform new construction and repairs in connection with side sewers and are paid by assessments against affected property owners. The number actually employed depends on the number of side sewers being built or repaired. Thus there are about 263 employments under the control of the Bureau.

As of June 30, 1960, the following held supervisory positions in the Bureau:

Sewage Treatment Division

K. Fraschina, Senior Engineer (Assistant to Bureau Head)
W. Jow, Acting Superintendent, North Point Plant
B. S. Martin, Superintendent, Richmond-Sunset Plant
J. H. Crafts, Superintendent, Southeast Plant

Sewage Pumping Division

P. A. Esposito - Assistant Engineer

Sewer Repair Division

W. J. Corwell - Assistant Superintendent
J. Murphy - Assistant Superintendent

The budget expenditures for the fiscal year totalled $2,033,552 of which $1,037,607 was for treatment plants and industrial wastes control, $116,000 for pumping stations and $879,945 sewer maintenance and repair activities. In addition, the Sewer Repair Division expended $175,438 for side sewers paid for by property owners.

	Sewage Treatment	Sewage Pumping	Sewer Repair
PERSONAL SERVICES			
Permanent Salaries*	$ 562,834	$ 78,362	$ 52,810
Overtime*	3,940	237	2,094
Holidays*	16,154	3,806	506
Temporary Salaries*	22,834	2,467	
Wages (Per Diem)	96,853		664,770
CONTRACTUAL SERVICES			
Power and Gas	127,971	21,466	
Plant Equipment	42,128	4,820	
Field Equipment	3,449	13	27,638
Landscape Maintenance	13,626		
Miscellaneous Services	483	898	9,008
Hired Trucks			40,966
MATERIALS AND SUPPLIES			
Replacement Parts	24,314	882	379
Field	707		37,256
Plant	17,782	1,257	
Fuels and Lubricants	2,615	357	12,683
Treatment Chemicals	100,622		
EQUIPMENT			
New			798
Replacement	1,295	1,438	31,037
TOTAL	$1,037,607	$116,000	$879,945

* - For monthly employees

The winter of 1959-60, like that of the previous year was marked by unusually light rainfall. Therefore there were relatively few serious sewer breaks during the year. Minor sewer failures continued to require attention.

On March 31, 1960, a gas explosion occurred in a sewer at the corner of Bush and Baker Streets. Two men who were working in the sewer were severely burned. As a result of this accident, the department has been required by the State Division of Industrial Safety to supply all underground crews with instruments for the detection of explosive gas mixtures. As of June 30, preparations for putting the order into effect were nearing completion.

SEWAGE AND WASTE TREATMENT DIVISION

General

The Sewage and Waste Treatment Division operates the North Point, Richmond-Sunset and Southeast Sewage Treatment Plants, controls discharge of industrial wastes, and advises on operation of sewage treatment facilities under jurisdiction of other City Departments.

The three plants operated continuously during the year except for limited shutdowns for planned repairs. During the fall, flow to the Southeast plant was reduced by blockage of the Sunnydale interceptor. Flow to the Richmond-Sunset plant was reduced from January 25 to February 18 while the Richmond sewer tunnel interceptor was out of service for cleaning and repair of the Sea Cliff pumping station force main. No new tributary areas were connected to the treatment plans during the year. The limited areas still discharging untreated sewage to the bay will be connected on completion of connecting sewers and pumping stations now under construction or planned.

There were two interrelated interruptions in sludge processing at the Southeast plant. A series of dryer explosions beginning January 20 caused by increased grease content sharply reduced solids removal from digestion and caused reduced digester activity. Internal gas line failures in two digesters aggravated the difficulty. In April drying was discontinued and sludge wastes discharged with the effluent. By June 4, digester activity had recovered sufficiently for normal operation to be resumed.

Treatment plant operation is still being seriously affected by lack of sufficient maintenance funds, which are not being increased in keeping with the age and needs of the plants. A backlog of required painting for equipment and structures still remains and equipment cannot be maintained adequately with available machinists and replacement parts.

The Bureau of Engineering performs engineering design for improvements. Major repairs and maintenance requiring the services of specialized crafts are done by other Department bureaus and by the Purchaser's shops. The Park and Recreation Department maintains landcaping at all plants under transferred funds.

SEWAGE TREATMENT METHODS

Each plant provides primary treatment for the removal of oil, grease, floating material, grit and settleable solids. Grit from all plants and screenings from the North Point and Southeast plants are hauled by truck to the garbage fill south of the county line. At the Richmond-Sunset plant screenings are incinerated and sludge is digested in two-stage digestion, elutriated, and dewatered by vacuum filtration. The filter cake is hauled to City parks for use as a soil conditioner. Raw sludge from the North Point plant is pumped to the Southeast plant where it is treated together with raw sludge from the Southeast plant. Treatment consists of thickening, two-stage digestion, elutriation, vacuum filtration and flash drying. A small quantity of the dried sludge is sold under contract as surplus.

TREATMENT PLANT OPERATION

The following table summarizes data on flows, material removed, chemicals added and products handled, and power and gas purchased for the three plants.

SUMMARY OF TREATMENT PLANT OPERATION

	North Point	Richmond-Sunset	Southeast
Sewage Flow, million gals.			
Total	17174 (a)	5318	6013
Avg day	47.0	14.5	16.4
Avg day, dry weather (b)	44.8	14.7	15.8
Max day, wet weather	90.0	22.4 (c)	31.3 (c)
Max day, dry weather	49.3	21.0	24.8
Max rate, wet weather	115	30 (c)	44 (c)
Max rate, dry weather	79	29	36 (d)
Screenings, cu ft			
Total	31825	8948	32970
Max day	258	42	260
Per million gallons	1.9	1.7	5.5
Grit, cu ft			
Total	53760	28780	45900
Max day	635	375	620
Per million gallons	3.1	5.4	7.6
Chlorination, lb (e)			
Pre	489990	87820	51300
Post	821800	430410	8700
Process water (effluent)	1030		
Total	1312820	518230	60000
mg per liter dry weather	11.6	13.8	(e)

SUMMARY OF TREATMENT PLANT OPERATION (Continued)

	North Point	Richmond-Sunset	Southeast
Sludge Solids, M lb (dry)			
From sedimentation	24708		28386 (f)
To digesters (g)		6219	32842
Filter cake		893	8532
Dried sludge			7968
Ferric Chloride			
Total, lb		47930	481600
% filter cake solids		5.37	5.64
Gas Production, M cu ft			
Total		26578	166230
Avg day		73	454
Power and Gas Purchased			
Power, total M kwh	5376.0	1790.4	4617.6
Power, avg/mo, M kwh	448.0	149.2	384.8
Natural gas, total C cu ft	75842	37904	185570
Natural gas, avg/mo, C cu ft	6320	3159	15464
Hauling			
Trips, grit and screenings	620		296
Trips, grit and filter cake		553	
Trips, dried sludge			302 (h)

NOTES

(a) For 365.4 days at North Point plant.

(b) Excluding days with .01 inch or more rain and dry days following days with .05 inch or more rain.

(c) Flow restricted during storms to avoid overloading grit handling facilities.

(d) Estimated-throttling of head gate obscures true flow.

(e) Pre-chlorination continuous at North Point and Richmond-Sunset except for brief shut-downs for repairs. Post-chlorination at North Point March through November and during extended periods of dry weather in winter months. Post-chlorination continuous at Richmond-Sunset except during storms. Chlorinators operated 36 days at Southeast plant in various combinations of pre-

and post-chlorination to determine optimum dosage; all chlorination discontinued after September 9 because of insufficient funds and high chlorine demand.

(f) Includes recirculating load from raw sludge thickening and digested sludge elutriation overflows.

(g) From raw sludge thickening.

(h) Hauling 817.5 tons used by City. Contractor hauled 3166.5 tons sold to him at $1.10 per ton.

Cost of Operation

Total expenditure for the fiscal year was $1,037,607. The cost was distributed as follows:

Personal Services	$702,615
Heat, Light and Power	127,971
Contractual Services	59,686
Materials and Supplies	146,040
Equipment	1,295

Based on an estimated population of 770,000 the cost of operation tion was approximately $1.35 per capita.

MAJOR MAINTENANCE

The following major maintenance contracts for the treatment plants were awarded during the year. Work done under contract by the Bureau of Engineering is indicated by the symbol (E).

North Point Plant

Reconstruction of "A" and "E" lift pump motors to correct failure to reach synchronous speed.

Richmond-Sunset Plant

Replacement of ventilation system in Sludge Control House (E).

Replacement of sash on windows and skylights in Administration Building and north side of Pretreatment Building.

Southeast Plant

Reconstruction of sludge dryer No. 2 including relining cyclones, new drying tower and air locks, and gate mill repairs (E).

SPECIAL STUDIES AND INVESTIGATIONS

1. Completed:

Comparison of dacron, dynel, and wool as blanket material for vacuum filters.

Cause of excessive dissolved oxygen depletion in dilution water used in 5-day BOD test at North Point plant.

Check on technique of standard air oxident collection method.

Effects of industrial wastes from San Francisco Airport on bay for Bureau of Engineering and Public Utilities Commission.

Identification of odor sources at sanitary fill for Bureau of Engineering.

Laboratory study of effect of discharging digested sludge with effluent at Southeast plan.

2. Continuing:

Source identification in leak and seepage complaints received by the Bureau.

Means of correcting excessive grease deposition in Fishermans Wharf area sewers.

Analysis of industrial wastes.

Chemical and bacteriological survey of shore waters.

Analysis of Islais Creek waters in cooperation with Water Pollution Control Board.

Air pollution analysis as given in 1958-59 Annual Report.

SEWAGE PUMPING STATIONS

General

The Sewage Pumping Division of the Bureau of Sewer Repair and Sewage Treatment operates and maintains fourteen sewage pumping stations which are divided into three districts corresponding to the tributary districts of the North Point, Richmond-Sunset and Southeast Treatment Plants. Their primary purpose is to prevent the pollution of recreational beaches and shore waters, by intercepting and boosting sanitary flow and some storm run-off from low-lying areas of the City into main interceptors leading to the treatment plants.

These stations are generally designed and constructed for capacities sufficient to handle all sanitary sewage and in addition, to take care of a rain storm of 0.02 inches per hour intensity. All stations, with one exception, are provided with overflow spillways so that run-off beyond the capacity of the station is discharged directly into the ocean or bay. In most cases, the stations have sufficient capacities so that one pumping unit can be shut down for repair during the dry season. Pumping equipment for each station is electrically operated by line starters energized by a combination of float switches which are automatically actuated by the periodic (or abnormal) rise and fall of the sump liquid level.

All stations except three are unattended. Operators are on duty during two eight-hour shifts per day (8 A.M. to 12 P.M.) at the Commercial Street and Marina Stations. At the Sea Cliff #2 station, an operator is on duty for a single shift each day (8 A.M. to 4 P.M.). These shifts are required to assure continued operation and to prvent flooding of basements in the Downtown Business District and pollution of recreational beaches and shore waters in the Yacht Harbor, Aquatic Park and Phelan Beach areas.

Personnel

During the fiscal year, there was no change in Division personnel. The thirteen budgeted employees were required for the following services:

Administrative: One Assistant Engineer, Electrical.
In charge of the Division's Budgeting, Supervisory, Personnel, Operational and Maintenance programs.

Supervisory: Three Operating Engineers.
Each under general supervision of the Engineer in charge of the Division: supervised subordinate personnel and performed related operational and maintenance duties as required for stations assigned within a district.

Maintenance and Operation: Nine Junior Operating Engineers. Each under supervision of an Operating Engineer in charge of a district; performed related duties as required for assigned stations.

Maintenance and Repairs

Major repairs requiring the services of specialized crafts are done by other bureaus of the Department and the Purchaser Shops. Major items completed in the year were:

Commercial Street

Replaced damaged discharge gate value to #3 pump and deteriorated discharge risers to three sewage pumps.

Fulton Street

Repaired fan motor and sump screening basket hoist controls.

Hyde Street

Repaired both pump motor couplings and check valves and sump pump motor.

Marina

Repaired #1 and #4 pumps, #2 pump impeller and shaft sleeve and #2 fan motor. Replaced damaged internal parts to #4 suction gate valve and starting coil to motor operated main effluent gate valve.

Park Merced

Replaced damaged shaft coupling to #2 pump.

Sea Cliff #1

Repaired both pumps and #1 check valve.

Sea Cliff #2

Repaired #1 pump keyway and coupling, #1, #3 and #4 check valves.

Yosemite Avenue

Replaced damaged hydraulic control valve, main influent gate valve trip and wash down pump push button station.

Improvements 1959-60

Vicente Street Station was revised to:

(a) Reduce volume and extend main influent line to sump.

(b) Alter existing sump and pump room floor.

(c) Provide sidewalk door and piping for sump access and ventilation.

(d) Provide automatic alternate system for pump operation.

Expenditures

Total Salaries	$ 84,869
Electric Power	21,466
Maintenance	5,731
Supplies	2,496
New Equipment	1,438
Total Expenditures	$116,000

Tables for individual station expenditures and unit cost data may be found in appendix of this report.

SEWER REPAIR DIVISION

The Sewer Repair Division cleans, repairs, maintains and makes minor additions to the various components of the sewerage system including main sewers, side sewers and appurtenant structures. The Division also tests for explosive and other gasses which may be found in the sewer system.

In order to organize the work the personnel are divided into units or working groups consisting of sewer cleaning units, service units, eductor units, main pipe sewer units, bricklayer units, side sewer units, gas detection unit, material trucks, digging unit and compressor unit. The latter three are subsidiary units in that their principal function is to assist other units in the performance of their work.

Table II shows work distribution, total expenditures by work units and unit costs where applicable. Unit costs do not include general department overhead and prorated allowance for equipment.

Sewer Cleaning

Sewer cleaning units clean main sewers, sumps and tanks at pumping stations and treatment plants and do miscellaneous work in connection with sewers and handle complaints occasioned by rains when service crews cannot handle all calls.

Sewers are normally cleaned by buckets dragged between manholes. Other methods employed are flushing and rodding of pipe sewers and manual cleaning of large sewers.

There are 6 sewer cleaning units, each consisting of 2 sewer cleaners and one laborer and equipped with a specially designed truck containing the necessary equipment such as hoses, buckets, cable and power hoists.

The principal activities of these units during the year was in the Sunset, Excelsior, and outher Richmond Districts. The Fisherman's Wharf area continued to be a serious problem to which there is as yet no apparent solution. The concentration of the large number of restaurants within the small area combined with the relatively flat grades causes many grease stoppages in the sewers. Another troubled area is to be found in the vicinity of Third and Evans Streets and along Quint Street where it was necessary to have a sewer cleaning unit spend 29 working days at a direct labor cost of about $2350. This figure does not include any overhead or equipment charges nor does it include anything for the services of an eductor unit which was needed to assist the sewer cleaning unit during a large percent of the time. The total cost of keeping the Quint Street sewer operating rather unsatisfactorily was undoubtedly well in excess of $5000. The two principal causes for this difficulty were (1) lack of control of industrial wastes discharges and (2) operational difficulties causing frequent shut-down of the Southeast Plant. The lack of control of industrial wastes is the result of the prolonged vacancy in the position of Industrial Wastes Engineer. The difficulties at the Southeast Plan are caused by a combination of design deficiencies and the inadequacy of past maintenance budgeting.

Eductor Operations

An eductor unit consists of a truck mounted Elgin eductor with a gasoline powered pump and a tank and manned by a Chauffeur and two laborers.

Its principal function is the cleaning of catch basins, but being a very versatile unit, it is put to many other uses where a source of water is needed or where pumping is required.

There are normally 8 eductor units operating with two additional machines for standby.

Service Units

Service units service complaints from the public and other sources, wet down main and side sewer backfills, flush sluggish or temporarily plugged pipe sewers, establish the necessity for specialized work by other crews and do miscellaneous emergency work.

Each of the 5 crews consist of one sewer cleaner, one chauffeur and one laborer and uses a one-ton truck with a special utility body equipped with hoses, lights, barricades and other tools and equipment. Four of the crews are on regular day work and the fifth unit works evenings from 4 P.M. to midnight. No week-end work is scheduled except during rainy weather.

Service crews spent 55% of their time on service calls and 45% on other work. During the fiscal year a total of 12,033 calls were made, 6,341 on complaints and 5,692 on other work.

The following tabulation shows the breakdown of work done by type of work and number and percent of calls.

	Calls			
Type of Work	Number		Percent	
Side Sewer				
Relieved clogged sewer	2818		23.4	
Found trouble inside property	686		5.7	
Wet down construction backfill	291		2.4	
Determine if side sewer exists	248		2.1	
Found side sewer broken	228	4271	1.9	35.5
Main Sewer				
Found main sewer broken	472		3.9	
Relieved clogged sewer	640		5.3	
Examined condition	476		4.0	
Wet down construction backfill	289	1877	2.4	15.6
Catch basins and Manholes				
Remove obstruction	442		3.7	
Replace cover	304		2.5	
Silence noisy cover	330		2.7	
Examine condition	174	1250	1.5	10.4

	Calls			
Type of Work	Number		Percent	
Miscellaneous				
Service lights and barricades	970		8.1	
Investigate seepage and leaks	583		4.9	
Clean at pump stations	457		3.8	
Deliver materials to job	198		1.6	
Remove deposits on sidewalk	89		.7	
Mosquitoes	2068		17.2	
Not classified	270	4635	2.2	38.5
Total		12033		100.0

Main Pipe Sewers

Cribbing crews excavate, lag and backfill main sewer trenches, lay pipe in the 6 and 8 inch sizes, excavate, lag and backfill for structure repairs, cut pavement and do miscellaneous work. When conditions are right these crews are frequently assisted by the digging unit.

There are normally 11 cribbing crews consisting of 2 cribbers each although this arrangement is subject to some variation to suit conditions.

During the year, 7204 linear feet of sewer were repaired or replaced at 437 locations. This represents a small increase over the previous year.

Bricklayer Work

Bricklayer crews repair main bricksewers, construct and repair manholes and catch basins, lay pipe over 8 inches diameter and do miscellaneous brick work where required.

Underground crews consist of one bricklayer and two hod carriers. Top crews have one bricklayer and one hod carrier. There are normally two top crews and 4 underground crews. A 1-1/2 ton truck is assigned to each of the two top crews.

During the year, 14,836 linear feet of brick sewer were repaired, 22 structures were built, 922 structures were repaired and 8 repairs were made to concrete sewers.

Side Sewers

Side sewer crews excavate, lag and backfill sewer trenches and lay sewer pipe. Two cribbers normally constitute a crew and the number of crews employed varies with activity in the building industry. As of the end of June there were 7 crews assigned to side sewer work. Two of the crews are motorized and carry sufficient tools, equipment and material to complete a job and move without delay. Non-motorized crews must be moved by the hired trucks.

Since side sewers belong to the fronting property owners, all side sewer construction and repair is at the expense of the property owner. All such work is done by this Bureau except where side sewer construction is included with main sewer construction under public contract.

During this year 464 side sewers were installed, 158 side sewers were repaired and 35 connections were made.

Gas Detection

The primary function of the gas detection unit is to conduct a continuing City-wide testing and inspection survey of the sewerage system. Tests for explosive and toxic gases are made at sewer manholes and at special locations such as pumping stations and sewage treatment plants. The gas most frequently detected is methane which usually results from leakage in gas mains and services.

On March 31, 1960 a severe explosion occurred in a sewer and two of our workmen were seriously burned. As a result, plans have been made to supply gas detection equipment to all underground units. The gas detection unit has been placed in charge of this program and as of June 30, the program is expected to be in operation soon, 21 detectors having been purchased for this purpose. This will result in fewer recorded tests by the Gas Detection Unit but will vastly increase the overall number of tests being performed.

Material Trucks

Five trucks together with their drivers are hired on a contractual basis to assist in the work of the Division. These trucks haul materials to jobs, remove waste materials to dumps and move non-motorized units from one location to another. One of these trucks is assigned the duty of visiting all jobs on Saturdays, Sundays and holidays and seeing that all lamps and barricades are in proper order.

Digging Unit

This unit consists of a combination front end loader and back-hoe which is manned by an engineer of hoisting and protable engines. It was first placed in operation in April 1959 and has become so indespensible that consideration is being given to requesting a second such unit. The unit assists in any excavation work where the danger of damage to other utilities is not excessive.

Compressor Unit

This unit consists of a truck mounted compressor with its tools manned by two cribbers and a chauffeur. It is used to assist other groups, principally main sewer crews in opening streets for excavations.

TABLE I

SEWAGE PUMPING STATIONS

Location	Drainage Area In Acres	Million Gallons Pumped	Expenditures						Unit Cost Per M.G. Pumped Per					
				Contractual						Contractual				
			Salaries	Maintenance	Heat Light & Power	Material & Supplies	Equipment	Totals	Salaries	Maintenance	Heat Light & Power	Material & Supplies	Equipment	Totals
General			$ 5,058	$ 13	$ 5	$ 64	$ 1,438	$ 6,578	$ 1.13	$	$ .01	$ .01	$ .32	$ 1.47
Commercial St.	93	316	19,382	651	1,275	478		21,786	61.33	2.06	4.03	1.52		68.94
Fitzgerald Ave.	30	28	242	14	230	23		509	8.64	.50	8.21	.83		18.18
Fulton Street	82	64	1,286	17	815	24		2,142	20.09	.27	12.73	.38		33.47
Hunters Point	90	126	1,640	30	918	60		2,648	13.00	.24	7.29	.49		21.02
Hyde Street	14	31	301	273	196	5		775	9.71	8.80	6.32	.17		25.00
Lakeshore	152	132	3,790	62	1,328	22		5,202	28.71	.47	10.06	.17		39.41
Marina	1,125	2,078	24,306	2,039	6,644	856		33,838	11.70	.98	3.20	.40		16.28
Mariposa St.	117	224	3,625	61	1,349	137		5,172	16.18	.27	6.02	.62		23.09
Park Merced	212	271	6,160	166	3,221	200		9,747	22.73	.61	11.90	.73		35.97
Pinelake	3	4	211	8	151	28		398	52.75	2.00	37.75	7.00		99.50
Sea Cliff #1	4	3	467	1,487	84	29		2,067	155.67	495.67	28.00	9.66		689.00
Sea Cliff #2	83	92	4,865	943	1,483	106		6,997	52.88	5.90	16.12	1.15		76.05
Vicente St.	52	83	2,430	32	766	38		3,266	29.28	.39	9.23	.45		39.35
Yosemite Ave.	527	1,013	11,106	335	3,001	426		14,868	10.96	.33	2.96	.43		14.68
Totals	2,584	4,465	$ 84,869	$ 5,731	$21,466	$ 2,496	$ 1,438	$116,009	$ 19.00	$ 1.29	$ 4.81	$ .56	$ .32	$ 25.98

TABLE II

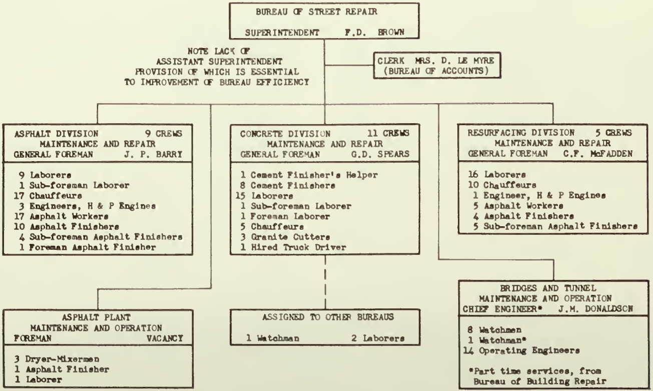
SHOWING WORK DISTRIBUTION & COST—SEWER REPAIR DIVISION

Work Unit		Per-cent			Totals		Cost Per Unit
1	Sewer Cleaning	90.7	Cleaning Sewers	97,855		429,079 Lin. Ft. Cleaned	.23
		9.3	Other Work	10,042	107,897		
2	Eductor Operations	67.6	Cleaning Catchbasins	89,971		16,675 Basins Cleaned	5.40
		32.4	Other Work	43,264	133,235		
3	Servicing	55	Servicing Complaints	54,653		6,341 Complaints	8.62
		45	Other Work	45,037	99,690		
4	Main Pipe Sewer Repairs	100	Repairing Pipe Sewers	161,839	161,839	7,204 Lin. Ft. at 437 Locations	22.46
5	Brickwork	59	Repairing Brick Sewers	71,249		14,836 Lin. Ft. Repaired	4.80
		6	Building Catchbasins	7,509		12 Catchbasins Built	625.78
		6.5	Building Manholes	8,017		10 Manholes Built	801.64
		10	Repair Catchbasins	12,148		434 Catchbasins Repaired	27.99
		12	Repair Manholes	14,355		488 Manholes Repaired	29.42
		6.5	Repair Concrete Sewers	7,811	121,089	8 Locations	976.37
6	Side Sewer Work		Installations	125,352		464 Installations	270.16
			Repairs	31,918		158 Repairs	202.01
			Connections	2,507	159,777	35 Connections	71.63
7	Gas Detection	42	Testing Manholes	5,478			
		58	Other Work	7,539	13,017	5,982 Manholes Tested	.92
8	Work Orders			2,253	2,253	Not Applicable	
9	Miscellaneous			34,073	34,073	Not Applicable	
	Total Not Including Work Unit 6			673,093			
	Total For Work Unit 6			159,777			
	GRAND TOTAL				832,870		

NOTE: The costs included here do not include overhead or other indirect charges.

CITY AND COUNTY OF SAN FRANCISCO
BUREAU OF STREET REPAIR
DEPARTMENT OF PUBLIC WORKS

ORGANIZATION CHART AS OF JUNE 30, 1960



BUREAU OF STREET REPAIR
SUPERINTENDENT F.D. BROWN

CLERK MRS. D. LE MYRE
(BUREAU OF ACCOUNTS)

NOTE LACK OF
ASSISTANT SUPERINTENDENT
PROVISION OF WHICH IS ESSENTIAL
TO IMPROVEMENT OF BUREAU EFFICIENCY

ASPHALT DIVISION 9 CREWS
MAINTENANCE AND REPAIR
GENERAL FOREMAN J. P. BARRY

9 Laborers
1 Sub-foreman Laborer
17 Chauffeurs
3 Engineers, H & P Engines
17 Asphalt Workers
10 Asphalt Finishers
4 Sub-foreman Asphalt Finishers
1 Foreman Asphalt Finisher

CONCRETE DIVISION 11 CREWS
MAINTENANCE AND REPAIR
GENERAL FOREMAN G.D. SPEARS

1 Cement Finisher's Helper
8 Cement Finishers
15 Laborers
1 Sub-foreman Laborer
1 Foreman Laborer
5 Chauffeurs
3 Granite Cutters
1 Hired Truck Driver

RESURFACING DIVISION 5 CREWS
MAINTENANCE AND REPAIR
GENERAL FOREMAN C.F. McFADDEN

16 Laborers
10 Chauffeurs
1 Engineer, H & P Engines
5 Asphalt Workers
4 Asphalt Finishers
5 Sub-foreman Asphalt Finishers

ASPHALT PLANT
MAINTENANCE AND OPERATION
FOREMAN VACANCY

3 Dryer-Mixermen
1 Asphalt Finisher
1 Laborer

ASSIGNED TO OTHER BUREAUS
1 Watchman 2 Laborers

BRIDGES AND TUNNEL
MAINTENANCE AND OPERATION
CHIEF ENGINEER* J.M. DONALDSON

8 Watchmen
1 Watchman*
14 Operating Engineers

*Part time services, from Bureau of Building Repair

BUREAU OF STREET REPAIR

F. D. Brown, Superintendent

FUNCTIONS

The functions of the Bureau of Street Repair continue to be substantially as stated in previous reports:

Routine work includes the maintenance and repair of streets and appurtenant structures such as gutters, curbs, retaining walls, public stairways, pedestrian underpasses and overpasses, guard rails and fences; the maintenance of City dumps; the maintenance and operation of lift bridges and tunnels.

Work ordered by the Director includes traffic channelization, minor street alterations, minor construction and emergency work for the protection of the City and/or the public.

Work performed for other departments or bureaus includes the repair of pavement in Municipal Railway track areas, the repaving of trenches opened by the Bureau of Sewer Repair for the installation or repair of side sewers, the repair of state highways within the City and the repair of pavements in school yards and the yards of other City institutions. The Bureau also performs other minor services of varied nature.

The City's charter provides that repair or reconstruction on any one job shall not exceed a cost of $2,000. It also prohibits work on unaccepted streets, except in emergency, and on sidewalks in front of private property. Unaccepted streets are those streets that have not been properly improved and officially accepted for maintenance and repair by the City.

Activities are further limited by state law governing the expenditure of monies from which the bureau is financed.

Maintained road mileage is as follows:

Secondary Streets (Secondary roads)	617.47
Major Streets (Primary roads)	193.73
State Highways	13.88
Total	825.08

Inasmuch as San Francisco is a combined city and county, its street and road systems are one and the same.

ORGANIZATION AND PERSONNEL

On July 16, 1959, Mr. Charles McFadden was appointed permanent 0 294 General Foreman of Street Repair, vice W. S. Balk who retired January 1, 1959 and on January 7, 1960, Mr. Gordon Spears was given similar appointment vice Thomas Breslin who retired January 1, 1960. Promotion of Mr. McFadden created a vacancy in Class 0 254 Foreman, Asphalt Plant, which had not been permanently filled as of June 30, 1960.

Upon appointment of two new general foremen, a change was made in organization in order to improve the distribution of work load among the three employed. The resurfacing crew, a cleanup crew and an engineer were transferred from the Asphalt Division to the Sealing Division. The engineer was assigned to the cleanup crew and the crew, whose major work will be heater-planing, was retitled Heater-Planing Crew. Resurfacing will become the major work of the former Sealing Division; hence, it has been retitled Resurfacing Division.

Resurfacing, heater-planing and crack sealing programs can be prepared for extensive periods; work for the five crews in the Resurfacing Division requires very little day to day planning. The General Foreman in charge of this Division can devote some time to special activities and to assisting the Superintendent.

The bureau's greatest personnel problems are caused by "chain" promotions and demotions and the limitation to ninety days for temporary appointments not made from Civil Service lists of eligibles.

A permanent vacancy existed in Class 0 254 Foreman, Asphalt Plant, throughout the year. In accordance with Civil Service rules, temporary appointments were tendered to senior employees in classes eligible for promotion to Class 0 254; three such appointments were necessary. When appointment was made from the rank of Dryer-Mixerman, chain promotions involved three other classes and the employment of a new employee to fill the last vacancy created. Only two Dryer-Mixermen were eligible for appointment; the third appointment was made from the rank of Foreman Asphalt Finisher. The latter involved an additional class in the promotion chain. Upon termination of an appointment the "chain" was reversed.

The filling of other temporary vacancies caused similar but lesser problems.

This bureau continues to be a clearing house for Chauffeurs.

Wage rates for chauffeurs vary according to the type of equipment operated; nine different rates are paid in the Department. It is the Department's policy to assign senior employees to the operation of the higher paying equipment. The filling of a high wage rate vacancy is a problem similar to "chain promotions". Approximately, of 100 Department employments, there are 70 at "high,", 20 at "intermediate" and 10 at "low" wage rates. Of the 70 at "high" wage rates, 60 are in other bureaus. Virtually all at "intermediate" rates are in this bureau. Hence, nearly all chauffeurs serve some time in the Bureau of Street Repair, making many inter-bureau transfers necessary.

Supervision

Supervision problems have been described in detail in past reports. A change in assignments, described in Organization and Personnel, has effected some improvement. However, it is still impossible for the Superintendent to devote sufficient time to field activities. Furthermore, it is believed that General Foremen are being assigned duties which should be allocated to an Assistant Superintendent.

Persistent budget requests have failed to receive approval of a much needed Assistant Superintendent.

Equipment

Equipment procured during the year consisted of replacements for worn out units, with the exception of "Asphalt Test Equipment". Replacement units are substantially the same as the units replaced.

Asphalt Test Equipment consists of screens, balance, oven, and work table for the physical testing of sand and gravel to be used in the manufacture of asphaltic mixtures.

MUNICIPAL ASPHALT PLANT

Asphaltic mixtures produced at the Municipal Asphalt Plant during 1959-60 were as follows:

		COMPOSITION - %				
Mix Designation	Tons	Asphalt	#6	5-16"	5/8"	1-1/4"
Surface	3,666	8-1/2	91-1/2			
School	6,145	7	60	33		
Topeka	36,796	6	45	25	24	
Spreader	-	5-1/2	40	25	17-1/2	12
Binder	1,769	3-1/2	21	28	22-1/2	25
Cold	142	*	35-1/2	27-1/2	30-1/2	
Total	48,518					

*1/2% asphalt and 6% Pacific specification 300 fuel oil. Aggregates were screened into "hot bins" from a combination of Antioch (fine graded) sand, coarse graded sand and three sizes of gravel. Asphalt used was 60-70 penetration, paving grade.

Production costs for the 48,518 tons produced during the year were as follows:

Direct Labor	$ 42,646	or	$0.88 per ton
Indirect Labor	1,853	or	.04 per ton
Overhead	9,330	or	.19 per ton
Materials	190,122	or	3.92 per ton
Gas, Electricity, etc.	16,384	or	.34 per ton
Total	$260,335	or	$5.37 per ton

There were no plant break-downs during the year but the plant was taken out of service two and one half days to permit installation of new mixer tips and mixer box liner plates. Other maintenance work and worn part replacement was done during slack work days or on Saturdays.

During February 1960, the mixer tower, cold elevator and portions of dryers and stack were cleaned, primed and painted. Painting was done by the Bureau of Building Repair, for a cost of $1,393, as a contractual service.

Screens, oven, balance and work table to be used for the physical testing of aggregates were procured during the year. Although all mixtures presently being produced appear to be quite satisfactory it is hoped that, with greater knowledge of materials, improvement can be made and/or costs reduced.

Expenditures

Accompanying tabulations show expenditures for each of the several budgeted items for each of the past five years. Percentage increases for road repair costs, wage rates and materials prices are shown for bridge and tunnel maintenance and operation costs and for salary rates are shown for "Bridges and Tunnel".

EXPENDITURES-STREET REPAIR

BUDGET ITEM	1955-56	1956-57	1957-58	1958-59	1959-60
Permanent Salaries	$ 32,553	$ 34,674	$ 37,467	$ 38,904	$ 41,401
Allowance for Overtime	239	96	163	59	109
Allowance for Holidays	462	491	582	771	773
Temporary Salaries	196	567	387	1,346 (a)	1,806 (a)
Wages	666,307	741,171	828,883	885,991	934,412
Contractual Services	86,982	100,535	84,244	83,840	94,161
Auto Mileage-Employees' cars	76	80	61	23	24
Truck Hire	53,976	36,115 (b)	10,271 (b)	11,507	12,195
Materials & Supplies	207,512	225,332	250,736	256,085	253,526
Equipment	25,388	51,836	48,224	93,286	20,652
Accident Compensation	12,073	7,889	8,187	12,801	19,759
Automobile Insurance					627
Retirement Allowance (c)	161,981	177,237	202,207	206,886	198,809
Allowance for Medical Plans				3,007	7,607
Services of Other Departments	14,565	17,812	19,787	21,181	22,936
Retroactive Wages	135				
Sub-Total	$1,262,445	$1,393,835	$1,491,199	$1,615,687	$1,608,797
Improvements	38,837	16,292	3,158	19,202	-
Gross Expenditures	$1,301,282	$1,410,127	$1,494,357	$1,634,889	$1,608,797
Road Repair Costs; % Increase:					
Over Previous Year		8.3	6.5	6.0	5.6
Over 1955-56		8.3	15.4	22.4	29.2
Wage Rates; % Increase:					
Over Previous Year		9.6	7.0	6.5	6.4
Over 1955-56		9.6	17.3	24.9	33.0
Materials Prices; % Increase:					
Over Previous Year		5.3	12.8	1.6	- 1.3
Over 1955-56		5.3	18.8	20.7	19.1

(a) Sick Leave Relief for retiring General Foremen.
(b) Six Hired Trucks replaced with City owned trucks.
(c) Includes Retirement Allowance for other Bureaus and Departments.

EXPENDITURES - BRIDGES & TUNNEL

BUDGET ITEM	1955-56	1956-57	1957-58	1958-59	1959-60
Permanent Salaries	$110,232	$114,986	$120,242	$123,669	$126,754
Allowance for Overtime		12	43	17	38
Allowance for Holidays	3,537	3,714	5,790 (a)	5,687	5,725
Temporary Salaries	10,148	13,560	10,167	13,151	6,297
Contractual Services	17,377	17,170	21,428	15,725	18,640
Materials and Supplies	2,622	2,073	1,206	1,180	1,224
Services of Other Departments	6,541	7,992	8,557	8,387	9,131
Total Expenditures (b)	$150,457	$159,507	$167,433	$167,816	$167,809
Expenditures: % Increase					
Over Previous Year	-	6.0	5.0	0.2	0.0
Over 1955-56	-	6.0	11.3	11.5	11.5
Salary Rates: % Increase					
Over Previous Year	-	6.5	8.0	8.0	5.5
Over 1955-56	-	6.5	14.9	24.2	31.0

(a) Rate increased from "straight time" to "time and one half".

(b) Retirement Allowance, approximately 12.5% of all salaries, is included in Street Repair budget.

WORK PERFORMED

	Unit	Quantity	Total Cost	Unit Cost
Asphalt Resurfacing-Hand				
Asphalt Paving	Sq. Ft.	63,618	$ 8,351	$ .131
(106.6 Sq. Ft. per ton)	Ton	597		13.99
Asphalt Resurfacing-Machine				
Asphalt Paving	Sq. Ft.	4,598,717	247,698	.054
(163.2 Sq. Ft. per ton)	Ton	28,183		8.79
Asphalt Resurfacing-Box				
Asphalt Paving	Sq. Ft.	963,111	77,232	.080
(157.9 Sq. Ft. per ton)	Ton	6,099		12.66
Asphalt Patching				
Asphalt Patching	Sq. Ft.	840,065	182,496	.217
	Ton	5,067		36.02
Compressor Work (Cut out)	Sq. Ft.	252,624	$ 34,795	.138
Asphalt Paving (Cut out)	Sq. Ft.	299,613	91,646	.306
	Ton	4,337		21.13
Clean up (Cut out)			54,155	
Total	Sq. Ft.	1,139,678	363,092	.319
	Ton	9,404		38.61
Curb Reset and Replaced				
Compressor Work	Lin. Ft.	29,436	29,360	.997
Granite, Reset	Lin. Ft.	15,984	17,254	1.079
Replaced	Lin. Ft.	2,920	4,453	1.525
Concrete, Reset	Lin. Ft.	11,002	11,927	1.084
Replaced	Lin. Ft.	1,380	4,548	3.296
Pavement, Asphalt	Sq. Ft.	18,409	14,741	.801
Concrete	Sq. Ft.	905	1,758	1.943
Sidewalk	Sq. Ft.	34 800	45,950	1.320
Clean up	Lin. Ft.	31,286	47,164	1.508
Total	Lin. Ft.	31,286	177,155	5.662
Concrete Curb Repair			8,088	

WORK PERFORMED (Continued)

	Unit	Quantity	Total Cost	Unit Cost
Curb Yard				
Redress Granite Curb	Lin. Ft.	5,325	12,640	2.37
Sort, Move, etc.			7,030	
Total			19,670	
Crack Sealing				
Sealing	Lin. Ft.	2,284,255	148,448	.065
Clean up			31,349	
Total	Lin. Ft.	2,284,255	179,797	.079
Manhole Casting Reset	Each	442	25,914	58.63
Concrete Pavement Repaired	Sq. Ft.	12,701	16,566	1.30
Sidewalk Reconstructed	Sq. Ft.	10,133	14,430	1.42
Mud Jacking			9,089	
Heater Planing	Lin. Ft.	180,489	33,111	.183
Slide & Debris Clean up			29,037	
State Highways				
Asphalt Paving	Sq. Ft.	2,230		
Heater Planing	Lin. Ft.	27,725		
Work for Other Bureaus and Departments			90,950	
Asphalt Paving	Sq. Ft.	170,490		
Concrete Paving	Sq. Ft.	8,343		

BRIDGES

Three bascule type bridges over navigable waterways are maintained and operated by the Bureau of Street Repair. These bridges are located at Third and Channel Streets, Fourth and Channel Streets and Third and Arthur Streets and are known as the Third Street Bridge, Fourth Street Bridge and Islais Creek Bridge, respectively.

All bridges are in continuous service, although openings of the Fourth Street Bridge between the hours of 8:00 p.m. and 4:00 a.m. must be prearranged with operators of the Third Street Bridge. Bridge operators, with the usual cooperation of ship captains, endeavor to time openings so as to minimize interference with roadway traffic; openings during the rush hours of 7:00 a.m. to 9:00 a.m., 12:00 m. to 1:00 p.m. and 4:00 p.m. to 6:00 p.m. are made for only the most urgent ship passages.

Each bridge is equipped with regulation lights for the guidance of navigators, coding siren with which to signal passing vessels and gates and signals with which to halt roadway traffic. An alarm, connected with the City's fire alarm signal system, alerts operators to any probable need for emergency opening for the passage of fire boats.

Controls, housed in a control room, are so interlocked that traffic signals must be set, traffic gates lowered and bridge lock opened, in sequence, before the bridge can be opened. Sequence is reversed for closing. Brakes are automatically set to prevent bridge leaves from moving if control is not held by hand in its proper position.

Routine maintenance such as greasing, making minor adjustments, etc., is performed by operating personnel. Minor repairs are made by mechanics whose services are requisitioned from other bureaus or departments. Major maintenance, repairs and alterations are usually performed by contract under the supervision of the Bureau of Engineering.

Bridge maintenance and operation is supervised by a Chief Operating Engineer whose part time service is obtained from another bureau. Other operating personnel will be described in following paragraphs.

Openings during each of the past five years were as follows:

Year	Third Street	Fourth Street	Islais Creek
1959-60	1008	573	762
1958-59	1203	757	1084
1957-58	1322	909	1492
1956-57	1185	629	1453
1955-56	800	290	1338

The construction of freeways has changed San Francisco's traffic pattern considerably. The use of Third and Fourth streets has declined. Estimated vehicles per day carried by each bridge and the estimated number carried five years ago are as follows:

	Now	Five Years Ago
Third Street Bridge	22,000	35,000
Fourth Street Bridge	4,500	6,000
Islais Creek Bridge	23,000	37,000

Third Street Bridge

The present Third Street Bridge was put into service May 12, 1933.

This through-type, single-leaf bascule bridge is 78 feet wide and 140 feet long and spans a waterway which has a clear width of approximately 100 feet between fenders. It accommodates four lanes of vehicular traffic between main trusses, and sidewalks and one traffic lane outside of main trusses. A steam railroad also crosses this bridge. Original wood deck was replaced with steel grating in 1953-54.

Control room is located at deck level beside the hinged end of the bridge; counter weights and mechanism are located in the bridge superstructure. The leaf is moved by two two-hundred horsepower electric motors.

The location of the control room does not afford the operator an unobstructed view of approaches; therefore, watchmen are provided to assist in directing and safeguarding roadway traffic. An operating enginner and a watchman are on duty each of two watches during the hours between 4:00 a.m. and 8:00 p.m. From 8:00 p.m. to 4:00 a.m. two operating engineers are provided; one acts as watchman but is available for emergency opening of the nearby Fourth Street Bridge which is not manned during those hours.

Fourth Street Bridge

The Fourth Street Bridge is the oldest of the three, having been put into service February 28, 1917.

This through-type, single-leaf bascule bridge is 60 feet wide and 90 feet long and spans a waterway which has a clear opening of 75 feet between fenders. It accommodates four lanes of vehicular traffic beween main trusses and sidewalks outside of main trusses.

Control room is elevated beside the hinged end of the bridge; counterweights and mechanism are located in the bridge superstructure. The leaf is moved by two forty-horsepower electric motors.

Although the operator has clear vision of approaches, it has been considered desirable to keep a watchman on duty at the landing end of the bridge. Until recently, an operating engineer and a watchman have been assigned to each of two watches during the hours between 4:00 a.m. and 8:00 p.m. However, as vacancies occur in the rank of watchmen, two positions will be left unfilled. As stated above, this bridge is not manned from 8:00 p.m. to 4:00 a.m.

Islais Creek Bridge

The present Islais Creek Bridge is the newest of the three, having been put into service in February, 1950.

This deck-type, double-leaf bascule bridge is 100 feet wide and spans a waterway which has a clear width of 98 feet between fenders. It accommodates six lanes of vehicular traffic and two sidewalks. Other than main quadrant gear housings, three at each end, there is little above the level of the steel grating deck to obstruct vision.

Control room is elevated beside one end of the bridge; counterweights and mechanisms are enclosed in waterproof pits below deck level. Each leaf is moved by two twenty-horsepower electric motors.

Because the location of the control room affords the operator unrestricted vision and because this is a double-leaf bridge, it has never been thought necessary to employ a watchman here. One operating engineer is on duty each of three daily watches.

An interesting incidental attendant to this bridge is that traffic signals also serve a nearby railroad crossing and a nearby fire house.

TUNNEL

Detailed descriptions of Broadway Tunnel and appurtenances may be found in report for year ending June 30, 1959.

VENTILATION - BLOWER OPERATING TIME

Year Ending June 30	North Bore - Westbound Traffic				South Bore - Eastbound Traffic			
	Slow		Fast		Slow		Fast	
	Hours	Percent	Hours	Percent	Hours	Percent	Hours	Percent
1960	200.1	2.28	5.9	.07	32.2	.37	26.2	.30
1959	228.5	2.61	5.6	.06	39.3	.45	33.9	.39
1958	291.6	3.33	10.0	.11	37.7	.43	23.6	.27
1957	322.4	3.68	7.8	.09	37.2	.42	26.3	.30
1956	585.7	6.67	12.7	.14	31.6	.36	20.3	.23
1955	384.2	4.39	14.9	.17	37.2	.42	2.9	.03
1954	509.9	5.82	17.8	.20	47.1	.54	2.5	.03
1953*	209.7	4.83	6.0	.14	67.8	1.56	6.3	.15

* - Tunnel put into service in December 1952

LIGHTING - LAMPS REPLACED

	Occasions	72T8's	72T12's	Total
Lamps in Service		1004	332	1336
Replaced During Year	4	395	72	467
Previously Replaced*	34	3625	185	3810
Totals	38	4020	257	4277

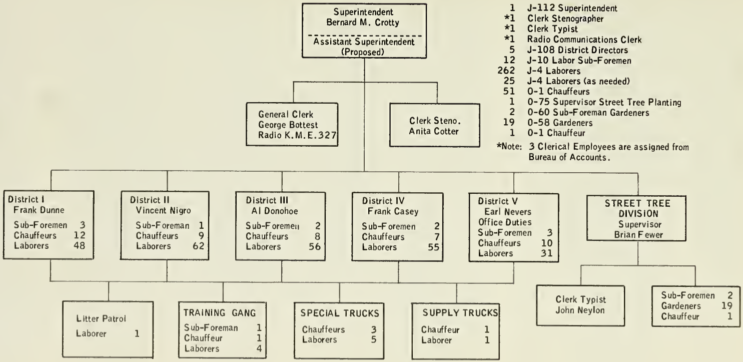
* - Tunnel put into service December 1952.

TRAFFIC COUNTS

			Eastbound	Westbound
Tuesday,	December	15, 1959	12,216	10,359
Thursday,	July	10, 1958	11,144	9,478
Wednesday,	March	16, 1955	10,607	9,795
Monday,	August	17, 1953	9,361	8,878
Wednesday,	February	11, 1953	8,668	8,770

ORGANIZATION CHART

BUREAU OF STREET CLEANING & STREET TREE PLANTING



1	J-112 Superintendent
*1	Clerk Stenographer
*1	Clerk Typist
*1	Radio Communications Clerk
5	J-108 District Directors
12	J-10 Labor Sub-Foremen
262	J-4 Laborers
25	J-4 Laborers (as needed)
51	0-1 Chauffeurs
1	0-75 Supervisor Street Tree Planting
2	0-60 Sub-Foreman Gardeners
19	0-58 Gardeners
1	0-1 Chauffeur

*Note: 3 Clerical Employees are assigned from Bureau of Accounts.

BUREAU OF STREET CLEANING

B. M. Crotty, Superintendent

The Bureau of Street Cleaning and Planting is responsible for cleaning 1648 curb-miles of accepted streets, 104 curb-miles of center islands, and for the maintenance of 90 acres of landscaping and over 6300 street trees. For these functions the Bureau had 354 employees and 66 units of motorized equipment. Expenditures totalled $2, 497, 571 for the year of which $2, 327, 437 was expended on street cleaning operations and $150, 138 on landscaping and street trees.

In Retrospect

The Bureau of Street Cleaning has shouldered substantial increases in work-load and responsibility during the past 10 years which was attended with only a minor increase in employments. Since 1950, there has been about 102 more curb-miles of street extensions and improvements, including 54 curb-miles of center islands, to be serviced by the Street Cleaning Division for which there was only an increase of one employment.

On July 1, 1955, the responsibility for maintaining street trees and landscaping on public thoroughfares was transferred to this Bureau. This new function became the Street Tree Division with an initial allowance of 17 employees to care for a total of 44 acres of landscaping, including about 4900 trees at various locations.

The above would indicate that the work-load of the Street Cleaning Division increased about 6-1/2 percent during the past 10 years with only about 0.3 percent increase in employments and that the work-load of the Street Tree Division increased in the past 5 years to over 100 percent in the care of landscaping and over 28 percent in the care of street trees with an increase of 23-1/2 percent in combined employments. These percentages of increased work-load do not reflect the intangibles of greater traffic congestion in street-work areas nor the assumption of many additional and essential work assignments which, if fully and conservatively evaluated, would probably show an overall increase of work-load in the Bureau during the past 10 years, of over 35 percent with less than a 7 percent increase in employment.

Highlights of the Year

The Bureau cooperated with the Citizens Committee for Litter Control appointed by the Mayor this year in an effort to educate the community with regard to the litter problem A month-long campaign to control litter in this City, conceived and developed by the Committee, was held during the month of May. The drive was made possible by a City appropriation of $6,000. The campaign was a full-scale success and merits continuation.

Since completion of the Candlestick Park baseball stadium this Bureau has been responsible for post-game cleanup of all access roads, and for cleaning the service road between the outer stadium property fence and the stadium structure. Cleaning of the parking lot is done by the parking concessionnaire.

The Bureau received in excess of 2500 mail and telephone requests for service this year, which is a reduction of about 500 from our last year's number.

Radio Station Operation

The Bureau of Street Cleaning operates the Department of Public Works Radio Station K.M.E. 327. This radio is in operation Mondays through Fridays, from 7 A.M. to 5 P.M. The 29 radio-equipped automobiles and trucks of the Department of Public Works are in constant touch with their offices through this radio, and can be readily contacted for routine or emergency assignments. The Bureau handled 13,385 calls last year, of which 8,815 originated with street cleaning

The value of the radio is inestimable when it is realized that an emergency of any description, from broken glass on the street to automobile accidents, can be reported and attended to within a maximum of 15 minutes, and, in many cases less time. Citizens are often surprised at the quick response to calls and are sometimes heard to say, "Why, I just hung up the 'phone and came out to have a long wait."

Blockmen

There are 126 blockmen or handsweepers assigned to cleaning routes in the downtown and outlying business areas. The number of blockmen was reduced from 128 last year. This reduction has been accomplished by the extension of gang-sweeping routes and motor-sweeper routes in some of our outlying residential and business areas which need daily cleaning service.

Blockmen in three of the five bureau districts were reassigned to other duties throughout the City in a move to improve services. Motor-sweeper and gang-sweeping service was substituted for blockmen in St.

Francis Woods, Monterey Heights and Westwood Highlands. One new route was created on Folsom Street between the Embarcadero and 11th Street in order to better serve the area. In the last two years block routes in 8 business and residential districts were replaced with mechanized service in order to improve operations.

Gang Sweeping

Eleven gang-sweeping crews are assigned to routes throughout the City where there is no blockmen sweeping. One of our gangs is now permanently assigned to weeding lots and other City-owned property that is under department jurisdiction.

The weeding gang also serves as a training medium for new employees assigned to the Bureau.

Activities of these gangs are summarized in Table 1.

Motor Sweeping

The eleven motor sweepers in this Bureau are used to clean areas where there is no heavy concentration of parked automobiles. A summary of this operation may be found in Table 2.

In the last few years numerous innovations have been developed in motor broom accessories, such as main broom fiber material, and gutter broom wire and assemblies. Some of these are being tested as time permits. There are many new main broom materials on the market, most of which are synthetic. Last year we experimented with a wire which was substituted for palmyra in the main broom. Although the mileage increased, problems were encountered which indicated need for further experiment with wire or with synthetic fiber. Some of the problems encountered with this wire involve the inability to pick up some street refuse, such as leaves; the possibility of injury to operator's hands because of tendency of the wire to retain string, rope, rags, etc., which can only be removed by hand, and if not removed results in blanks in the sweeping pattern.

Motor Flushing

The Bureau has nine motor flushers which are used to augment the other cleaning operations. The practical results realized through the proper use of motor-flushing are of great value in street cleaning. Flushing is used to move material from the center of the street to the curb where it can be more readily removed by hand and motor sweeping operations; for emergency cleanups, to remove objectional material from street surfaces; to freshen the water in catchbasins; and to enter water into seldom used sewers during the dry season.

The Bureau received delivery of 2 new 2500-gallon flushers this year. As our old smaller 1500-gallon capacity units wear out, it is our intention to replace them with the larger 2500-gallon size. The larger flusher enables the crew to clean more miles of streets with less stops for refilling.

One of our motor flushers is equipped with a two-way radio which provides ready means of dispatching the equipment to any part of the City. More emphasis is being placed upon vehicles for Public Works which can be used for civil defense. Ouf flushers can double as fire fighters or as carriers of pure water in cases of public emergency.

A record of the activities of the flushers for the past year may be found in Table 3.

Litter Control

Ten litter control trucks are used by the Bureau, on an assigned route basis, for removing litter deposits and for cleaning areas known as paper pockets. In addition, one small unit equipped with a two-way radio and manned by a laborer is assigned to emergency calls transmitted by our radio operator. This unit during the year answered in excess of 2,000 calls, ranging from bundles of newspapers broken open and blowing around to broken glass.

Collection

Six trucks are used to remove sweepings from cans used by blockmen, and for emptying waste receptacles used by pedestrians. This Bureau has acquired another 20-yard load packer which will enable more cans to be placed for pedestrian use. Our older units are only 13 cubic yard units which limits the amount of material that can be removed from waste receptacles before proceeding to the dump. As our older units are replaced, we will purchase these new hydraulic load packers.

Utility Trucks

There are four utility trucks used for roving assignments, including Corporation Yard cleanup, Purchaser's Shop waste removal, cleanup of motor sweeper deposits and fill-in for other units out of service. One of these utility trucks is radio-equipped which allows contact in the field for assignment to any location in the City for emergency work.

Tunnel Cleaning

Since completion of the Broadway Tunnel in 1952 the Bureau of Street Cleaning has received work orders from the Bureau of Street Repair to regularly clean and wash the interior surfaces of the tunnel. Although the Bureau of Street Cleaning has regularly cleaned the tunnel, noticeable amount of residue continued to cling to the tile surface and defied removal by the usual cold water and agitating methods. It was decided that a more effective means of cleaning was to be employed if our cleaning attempts were to be of any value. Whenever a new product was advertised, or shown by salesmen, demonstrations were arranged, but none were any more effective than that which was being used. The tunnel was cleaned with steam this year for the first time through use of the portable Jenny Steam Cleaner which was pulled by a flat-bed truck on which was mounted a double-decked scaffold. This was followed closely by a motor flusher which was used for water supply. A second motor flusher followed these units and rinsed the loosened dirt from the tile. The results of this operation were most gratifying even though we did not succeed in removing all the accumulated scum and also lost the use of 3 pieces of equipment to regular street cleaning function for approximately 10 working days. It is expected that our next steam cleaning operation will result in removal of all the dirt and scum from the walls and crown of the tunnel.

Preventive Street Cleaning

Successful preventive street cleaning has been a dream of many dedicated people for many years, both in and out of public service. This last year has seen the ambitions of many begin to bear fruit in the form of a group known as "Citizens Committee for Litter Control," as previously mentioned.

In addition to cooperating with this Committee the Bureau ordered 30 No Litter signs as designed by the Bureau of Engineering and which have been placed throughout the City on heavily travelled streets.

This Bureau also purchased 25 new pole-type waste receptacles for use by pedestrians in our downtown areas.

STREET LANDSCAPING AND TREES

The Street Tree Division maintained about 90 acres of landscaped areas and 6,300 trees through the services of 21 employees and at a total expenditure of $150,138 for the year.

Included in this maintenance are 9 acres of landscaping and 145 trees which were planted under public contract during the year at the following locations:

	Landscaping (Sq. Ft.)	Number of Trees
Geary Boulevard	77,400	80
Upper Market	22,500	10
Portola Drive	169,500	25
Christmas Tree Point	70,000	10
Twin Peaks Blvd. at Clarendon	1,000	-
Lick Freeway Interchange Area at 3rd Street	48,500	20
Total	388,900 (about 9 acres)	145

Not included in the above listing are about 0.5 acres of landscaping and 100 trees on City properties that were given occasional service to correct safety hazards.

Arbor Day (March 7, Luther Burbank's birthday) was made the occasion to designate the week of March 6th through 12th as Plant a Tree Week. The event was co-sponsored by the local Chamber of Commerce and Garden Club as a medium to arouse the interest of property owners in planting and maintaining trees along streets as part of a continuing program to beautify the City and "to put greenery in the City's sidewalks." The occasion received the enthusiastic support of civic-minded organizations and many interested individuals. The bureau cooperated by providing an exhibit of various specie trees suitable for the City's climatic conditions and in advising of proper planting procedures. Also, the bureau's Supervisor of the Street Tree Division guided a conducted tour of the City's street trees and landscaping by a bus provided through the courtesy of Gray Lines Tours, Inc.

The bureau prepared a 5-year planting program, with the assistance of the Street Tree Advisory Committee, as a guide for preparing annual budget requests.

The pilot-tree program undertaken by the bureau several years ago has led to the use of new species that are more suitable as street trees and which can be maintained at less expense.

A jet-type irrigation jig was developed along the lines of a tool recently demonstrated at the National Shade Tree Conference for watering the roots of newly planted trees. This jig forces water into the soil at deep levels so as to encourage deeper root growth, promote healthier growth and to reduce the extent of sidewalk heaving caused by shallow watering.

An experimental shower ring and curtain was developed by this Division for use in washing the soot and dust from the foliage of young trees. The device will also be used for foliar feeding.

Appreciation is expressed for the diligent work of the Street Tree Advisory Committee. The Committee continued to be constituted of Mr. William Siden, Chairman, Mrs. Morley Thompson and Messrs. Keith Davey, Sylvester Evans, Roy Hudson, Jack Spring and Harry Nelson.

TABLE I

DEPARTMENT OF PUBLIC WORKS
Bureau of Street Cleaning
CITY & COUNTY OF SAN FRANCISCO, CALIFORNIA

Annual Report - Gang Sweeping - Fiscal Year 1959-1960

(Sweeping Frequencies for Gang Route Numbered:)

Month	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12
1959												
July	1.53	4.60	4.00	3.00	1.64	2.55	2.25	2.00	1.50	1.75	3.80	*
August	1.00	3.20	2.30	3.50	1.50	2.33	2.00	1.80	2.50	2.00	3.60	
September	1.46	4.00	2.50	2.60	1.57	1.25	2.25	3.80	1.50	1.50	4.00	
October	1.46	4.40	4.40	4.60	3.00	2.44	2.50	4.40	2.25	2.50	4.60	
November	1.40	4.20	4.00	3.00	1.40	2.33	2.75	1.80	1.75	2.30	4.60	
December	2.00	4.60	3.00	4.00	1.53	2.55	2.50	3.00	2.00	2.50	4.00	
1960												
January	3.00	4.20	4.00	5.00	1.75	2.75	2.75	2.50	2.20	2.30	4.40	
February	1.50	3.20	3.50	4.00	1.40	2.33	2.25	2.80	2.00	2.00	4.00	
March	1.53	4.60	4.40	4.40	1.64	2.55	2.50	3.80	3.25	2.80	4.40	
April	1.75	4.00	4.00	3.50	1.50	2.33	4.00	3.20	2.75	2.50	4.00	
May	1.46	4.60	4.00	3.00	2.00	2.44	2.75	3.00	2.00	2.30	3.80	
June	1.57	3.00	2.50	4.20	1.00	2.00	2.25	2.80	1.75	1.50	4.00	
Totals	19.66	48.60	42.60	44.80	19.93	27.85	30.75	34.90	25.45	25.95	49.20	

NOTE: Each gang is under supervision of a Labor Sub-Foreman and is composed of 4 to 6 hand-sweepers with a truck crew of 1 Chauffeur and 2 Laborers. Length of each route varies from 66 to 270 curb-miles.

* - Gang #12 is Weeding Gang.

TABLE II

DEPARTMENT OF PUBLIC WORKS
Bureau of Street Cleaning
CITY & COUNTY OF SAN FRANCISCO, CALIFORNIA

Annual Report - Motor Sweeping - Fiscal Year 1959-1960

			DISPOSITION OF 11 SWEEPERS (Hours)				
Month	Curb Miles Swept	Sweeper Loads (Number)	Sweeping	Downtime*	Total Work-Day Hours	Downtime* (Percentage)	Average Number of Sweepers In Operation
1959							
July	4,509	288	1455	648	2,103	30.81	7.62
August	4,040	299	1314	642	1,956	32.81	7.40
September	4,249	299	1349	574	1,923	29.82	7.72
October	3,748	284	1203	721	1,924	37.46	6.88
November	3,601	249	1141	821	1,962	41.83	6.40
December	3,448	229	1127	854	1,981	43.10	6.26
1960							
January	3,435	219	1076	875	1,951	44.83	6.07
February	3,541	256	1123	760	1,883	40.34	6.57
March	5,369	320	1661	456	2,117	21.53	8.64
April	4,705	298	1483	510	1,993	25.57	8.19
May	4,550	280	1466	258	1,724	14.95	9.36
June	3,770	225	1140	790	1,930	40.90	6.51
Total	48,965	3,246	15538	7,909	23,447	-	-
Averages per month	4,080	270	1294	659	1,953	33.66	7.30

NOTE: *Downtime includes all work-day time that equipment is not engaged in actual street-sweeping; such as when undergoing repairs, held for servicing or for standby.

TABLE III

DEPARTMENT OF PUBLIC WORKS
Bureau of Street Cleaning
CITY & COUNTY OF SAN FRANCISCO, CALIFORNIA

Annual Report - Motor Flushing - Fiscal 1959-1960

			DISPOSITION OF 9 Flushers (Hours)				
Month	Curb Miles Flushed	No. of Stops for Refilling Water Tanks	Flushing	Downtime*	Total Work-Day Hours	Downtime* (Percentage)	Average Number of Flushers in Operation
1959							
July	6,055	3,601	1,286	185	1,471	12.55	7.87
August	5,489	3,359	1,079	343	1,422	24.11	6.83
September	4,861	3,041	1,060	363	1,423	25.50	6.70
October	5,576	3,374	1,199	371	1,570	23.60	6.87
November	5,333	3,136	1,094	345	1,439	23.95	6.84
December	5,668	3,361	1,226	344	1,570	21.91	7.02
1960							
January	5,427	2,969	1,234	216	1,450	14.87	7.66
February	4,855	2,810	1,106	330	1,436	22.95	6.93
March	6,401	3,808	1,348	263	1,611	16.30	7.53
April	6,099	3,652	1,280	106	1,386	7.61	8.31
May	6,216	3,490	1,289	76	1,365	5.53	8.50
June	6,191	3.473	1,293	167	1,460	11.40	7.97
Total	68,171	40,074	14,494	3109	17,603	210.28	89.03
Averages per mo.	5,680	3,339	1,207	259	1,466	17.52	7.41

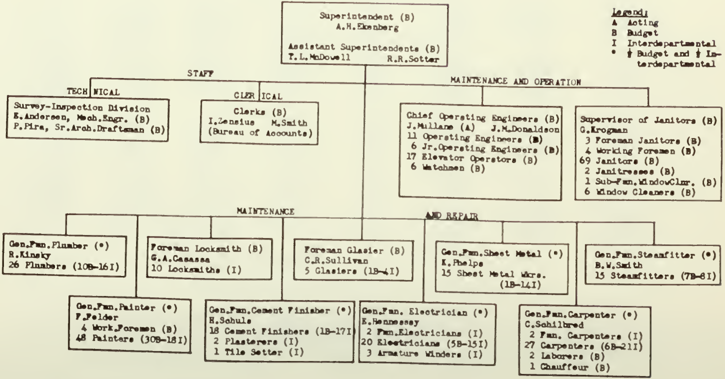
NOTE: Each flusher is operated with 1 Chauffeur and 1 Laborer for handling flushing controls.

*Downtime includes all work-day time that equipment is not engaged in street flushing; such as when undergoing repairs, held for servicing, or standby or when operating on work of different nature.

BUREAU OF BUILDING REPAIR
DEPARTMENT OF PUBLIC WORKS

ORGANIZATION CHART

1959-60



Superintendent (B)
A.H.Ekenberg

Assistant Superintendents (B)
T.L.McDowell R.R.Sotter

Legend:
- A Acting
- B Budget
- I Interdepartmental
- • ½ Budget and ½ Interdepartmental

STAFF

TECHNICAL

Survey-Inspection Division
E.Andersen, Mech.Engr. (B)
P.Pira, Sr.Arch.Draftsman (B)

CLERICAL

Clerks (B)
I.Zensius M.Smith
(Bureau of Accounts)

MAINTENANCE AND OPERATION

Chief Operating Engineers (B)
J.Mullane (A) J.M.Donaldson
11 Operating Engineers (B)
6 Jr.Operating Engineers (B)
17 Elevator Operators (B)
6 Watchmen (B)

Supervisor of Janitors (B)
G.Krogman
3 Foreman Janitors (B)
4 Working Foremen (B)
69 Janitors (B)
2 Janitresses (B)
1 Sub-Fmn.WindowClnr. (B)
6 Window Cleaners (B)

MAINTENANCE AND REPAIR

Gen.Fmn.Plumber (•)
R.Kinsky
26 Plumbers (10B-16I)

Gen.Fmn.Painter (•)
F.Felder
4 Work.Foremen (B)
48 Painters (30B-18I)

Foreman Locksmith (B)
G.A.Casassa
10 Locksmiths (I)

Gen.Fmn.Cement Finisher (•)
H.Schulz
18 Cement Finishers (1B-17I)
2 Plasterers (I)
1 Tile Setter (I)

Foreman Glazier (B)
C.R.Sullivan
5 Glaziers (1B-4I)

Gen.Fmn. Electrician (•)
E.Hennessey
2 Fmn.Electricians (I)
20 Electricians (5B-15I)
3 Armature Winders (I)

Gen.Fmn.Sheet Metal (•)
K.Phelps
15 Sheet Metal Wkrs. (1B-14I)

Gen.Fmn.Carpenter (•)
C.Schilbred
2 Fmn. Carpenters (I)
27 Carpenters (6B-21I)
2 Laborers (B)
1 Chauffeur (B)

Gen.Fmn.Steamfitter (•)
B.W.Smith
15 Steamfitters (7B-8I)

BUREAU OF BUILDING REPAIR

A. H. Ekenberg, Superintendent

This Bureau is, as the name implies that division of the Department of Public Works Maintenance and Operation activities which deals primarily with our public buildings. The scope of Bureau responsibilities is wide and varied, but of primary importance is the providing of services and materials for the maintenance, repair, replacement and reconstruction of the 317 City and County buildings which have been established by Charter authority or other policy determinations as being the responsibility of the Department of Public Works. While the above is the primary function, the following are the secondary Bureau activities, in relative order of importance and/or dollar value:

1. Provide operation and custodial personnel and supplies for 32 of the above buildings, requiring the full time services of 121 employees.

2. Provide necessary maintenance and repair services to other City departments through an interdepartmental work order procedure, or by competitive public contract. Relative importance and proportions of this phase of Bureau activities is illustrated graphically in Figure 1. The major portion of this work will be noted as being derived from the Board of Education, with other City departments accounting for lesser amounts.

3. Budget for and provide labor, materials, supplies and contractual services for street traffic painting. The units of work performed and the unit costs thereof are shown on Table 2.

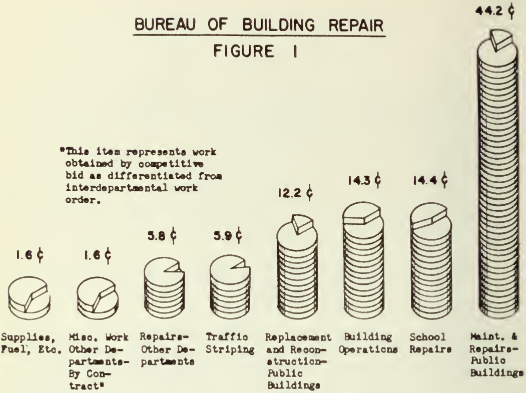
4. Provide inspection and survey services necessary for the development of a preventive maintenance program, and the compilation of data and material for the intelligent preparation of budgets. In addition, providing technical consultation and assistance to the operating activities in the appropriate maintenance and repair of properties.

5. Maintenance and repair of street name signs.

6. Repair of street structures and sidewalks fronting on City property, and of various monuments in street areas.

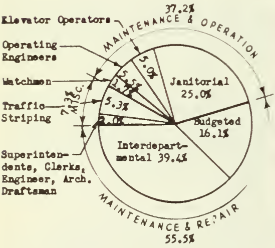
BUREAU OF BUILDING REPAIR

FIGURE I

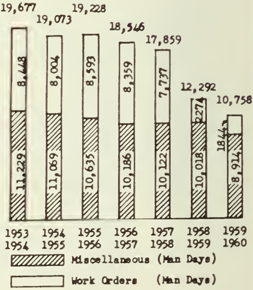


*This item represents work obtained by competitive bid as differentiated from interdepartmental work order.

HOW THE DOLLAR IS SPENT



ASSIGNMENT OF PERSONNEL



SCHOOL REPAIRS

ORGANIZATION AND PERSONNEL

The organization chart included as a part of this report indicates the primary divisions within the Bureau, and their function as regards maintenance and repair, and maintenance and operation, in addition to the technical and engineering division providing survey and inspection services. Division, shop, or craft heads are shown therein as of June 30, 1960. In addition, the chart indicates the budgeted as contrasted with the interdepartmental positions.

Personnel of the administrative, technical and operational divisions consists entirely of budgeted employees, as does the clerical staff assigned to this Bureau from the Bureau of Accounts.

In the maintenance and repair or shop divisions, however, the majority of employments are enumerated as interdepartmental, and are not established as continuing positions, but only "as needed" when the services are required and the funds are provided. The major portions of these interdepartmental employments have been derived from school funds during preceding years. Of the budgeted shop employees, most are on assignment to various major public buildings. Such assignments, however, are not inflexible, and are subject to call as necessary when when the need is urgent elsewhere.

SIGNIFICANT CHANGES, PROBLEMS, AND PROGRESS OF 1958-59

Schools

During the past fiscal year the interdepartmental services supplied to the School Department, while again declining, are now believed to have stabilized to a certain degree. However, total average man days for the period 1956-58 was 18,548 annually. This was sharply reduced by 33.7% during fiscal year 1958-59, and during the past year, dropped an additional 7.7%. Work load for the past year was thus only 58.5% of the previous 3 year average.

Since work done for the School Department represents approximately 80% of all interdepartmental work done by this Bureau, such a sudden and marked diminution has had a marked impact on personnel distribution and total operations. In terms of personnel it represented slightly over 30 employments, while from an operational and functional standpoint several re-adjustments were made necessary.

Miscellaneous repairs, done on a daily special requisition basis, continued to constitute the major portion of work done for the schools, and average over 1100 per month. An analysis of 5581 requistions indicated an average total cost of $27.89 each, of which material constituted 24.2%. Glass breakage, through an alarming rise in vandalism, is responsible for the one trade which now requires more, rather than less, manpower each year, and whose labor and material costs are constantly increasing. In vacation periods particularly, we now find instances in which glass breakage in a single school exceeds $1,000 over one weekend.

Salaries, Wages, and Overhead Costs

In common with nationwide trends, Bureau wages and salaries increased significantly during the year. Weighted average for all Bureau wage personnel indicated an increase of 8.2% over the preceding year, while salaried personnel increased 4.6%. Weighted average for both groups combined indicated an increase of 7.2%. Total overhead for interdepartmental operations averaged 45.009% for 1958-59, with certain prospects for greater costs during 1960-61 with the additional costs of Social Security and the Health Service System being added.

Contract Awards

As was done during preceding year, the Bureau continued to submit bids on certain Department of Public Works contracts which were suitable to normal Bureau operations and functions. Bids were submitted on a total of 37 formal and informal proposals and the Bureau was the low bidder on 15 of these. Award was given to the Bureau on 14 jobs; one, being a tie bid of $23,219 was awarded to the private bidder. On two bids the Bureau was the sole bidder. Total department awards to the Bureau were $63,645; had the Bureau not bid, the 12 jobs on which other bids were made would have totalled $8,387 more. In addition, Bureau overhead on direct labor, while calculated at 50% for estimate purposes, in actuality averaged 45.009% for the year. The excess portion automatically reverts to the City, as does any windfall of unanticipated material or labor savings, and which has on occasion been substantial.

Candlestick Park

In March 1960, by emergency appropriation, the Board of Supervisors made available $287,745 for the completion of Candlestick Park by April 12 on a crash basis, to be accomplished in the most expeditious manner possible. Of this, the Bureau of Building Repair was given over $70,000 for certain specific jobs, which were successfully accomplished by the target date.

Subsequently, the Bureau was given the responsibility for the maintenance and repair of the structure and city-owned equipment under work order procedure from the Recreation and Park Department, under whose technical jurisdiction the property remains.

Some concept of size and value may be realized when it is noted that the prime contract for the Stadium and parking lot was for $7,046,000. The stadium contract alone was for $5,113,000, and on which the contractor is presently seeking additional amounts of over $2,000,000. Mechanical work on the stadium totalled over $733,000, and the electrical work over $670,000.

The maintenance and repair of such a structure represents a completely new experience for this Bureau, and anticipated annual operating costs are unknown and presently unpredictable. As such become known they will be noted in future reports.

Cars and Trucks

Gains have again been made during the past year in the elimination of over-age and obsolete vehicles, and in the reduction in number of rented trucks. At the close of the year the Bureau required the use of 71 vehicles, of which 12 are special purpose trucks for traffic painting, 15 are passenger cars, 40 are various light trucks, and only 4 were rented light trucks.

During the course of the year, passenger cars averaged 5488 miles per vehicle, at an average annual operating cost (gas-oil-miscellaneous maintenance and repair) of $109.45 each, or $.01994 per car-mile.

Trucks during this period averaged 5354 miles per vehicle, with annual operating costs averaging $203.05 each, or .03792 per mile. For the 4 rented trucks, rental and operating costs to the City averaged $88.32 per month per vehicle, with rental costs based on an estimated 600 miles per vehicle per month.

TABLE I

PUBLIC BUILDINGS UNDER THE JURISDICTION OF THE DEPARTMENT OF PUBLIC WORKS FOR MAINTENANCE AND REPAIR

	Buildings		1959-60	
Department and Activity	No.	Floor Areas Total Sq.Ft.	Total Budgeted Funds (Interdepartmental & General Repair	Unit Costs Based on Floor Areas-$/Sq. Ft.
Fire Department	56	590,000	$ 112,674	$0.191
Police Department (C)	13	118,807	34,290	0.289
Public Health				
Health Center Bldg. (C)	(4	103,370		
and Health Centers	(7 (R)	22,151	16,710	0.133
Adult Guidance Center	-	(4,500)	250	0.056
V.D. Control	1 (R)	6,200	874	0.141
Emergency Hospitals	6	33,352	8,265	0.247
Hassler Health Home	17	130,000	47,000	0.362
Laguna Honda Home	25	650,000	518,326*	0.797*
San Francisco Hospital	33	753,000	631,629*	0.839*
Public Library	(19	314,540	42,050	0.128
	(8 (R)	13,280		
Public Welfare				
585 Bush Street	1	43,791	9,680	0.221
150 Otis Street	-	(17,900)	2,200	0.123
S.M.R.C.-Redwood City	1	10,000	2,201	0.220
Public Works				
City Hall (C)	2	526,540	103,856	0.197
Hall of Justice (C)	2	162,523	40,736	0.250
150 Otis Street (C)	2	40,900	9,820	0.240
Maintenance Yard (C)	10	72,890	11,360	0.153
Sewage Pumping Stations	14	23,085	5,960	0.258
Sewage Treatment Plants	36	543,330	91,748	0.169
Real Estate Department				
Civic Aud.-Brooks Hall	2	434,500	28,880	0.067
Sheriff				
County Jails #2 & #4	7	138,970	25,783	0.186

Department and Activity	Buildings No.	Buildings Floor Areas Total Sq.Ft.	1959-60 Total Budgeted Funds (Interdepartmental & General Repair	Unit Costs Based on Floor Areas- $/Sq. Ft.
Juvenile Court				
Youth Guidance Center	16	200,828	31,881	0.159
Log Cabin Ranch	16	32,000	14,402	0.450
Misc. Departments	16	214,994		
and Activities	1 (R)	6,012	17,230	0.072
	-	(20,700)		
TOTALS	315	5,185,063	$1,807,805	Ave. 0.349

NOTES:

(R) Indicates building is rented. (Total of 17 rented buildings with a combined floor area of 47,643 square feet.)

(C) Indicates custodial and/or operational services also provided by Bureau of Building Repair.

(00,000) These floor areas are not added to obtain the total floor areas of all buildings as these areas are included elsewhere with other buildings.

Figures disproportionately large because of current deffered maintenance program which represents work not done in prior years.

($499,530 allowed for Replacement & Reconstruction of Public Buildings are not included in any of the above sums.)

STREET TRAFFIC PAINTING

TABLE 2

Classification	Unit	Amounts	Unit Cost	Total Cost
Traffic Line Striping	Lin.Mile	518.81	$86.00	$ 44,618.16
Traffic Line Spotting	Lin.Mile	47.90	92.05	4,409.23
Intersections-General				
(a) Crosswalks (including words)	Lin.Ft.	412,740	0.1042	43,006.43
(b) Guidelines (including words)	Lin.Ft.	121,038	0.1185	14,338.83
School Crosswalks (including words)	Lin.Ft.	175,365	0.1550	27,184.72
Bus Zones (including words)	Lin.Ft.	96,066	0.1024	9,838.97
Parking Stalls				
(a) Diagonal	Number of Stalls	2,903	0.8310	2,412.47
(b) 4-foot cross	Number of Stalls	4,953	0.8256	4,089.07
Railroad Crossings	Lin.Ft.	11,880	0.0990	1,176.31
Curb Painting				
(a) General	Lin.Ft.	488,003	0.0971	47,365.25
(b) Taxi	Lin.Ft.	5,852	0.1193	698.41
				$199,137.87

The cost shown is the direct cost including working foreman, labor, materials, supplies and contractual service corresponding to the Bureau work program and budgeted funds.

BUREAU OF ACCOUNTS

J. J. McCloskey, Chief Clerk

The principal function of the Bureau of Accounts is the control of the budgetary and financial activities of all bureaus in the Department of Public Works. All documents dealing with the appropriation, allocation and disbursement of funds originate in the Bureau which channels them through required procedure until final liquidation.

Although there has been an ever increasing work load due to the larger volume of work being performed by the Department, no additional employees were added to the Bureau of Accounts during the year.

The personnel of the Bureau as of June 30, 1960 consisted of:

1 - Chief Clerk
5 - Accountants I
2 - Accountants II
1 - Accountant III
9 - General Clerks
1 - Senior Clerk
2 - Head Clerks
2 - Key Punch Operators I.B.M.
2 - Tabulating Machine Operators I.B.M.
1 - Supervisor, Tabulating Division
4 - General Clerk - Stenographers
6 - General Clerk - Typists

Budget expenditures for operation of the Bureau of Accounts for year 1959-60 were as follows:

Permanent Salaries	$158,405.00
Overtime Allowance	720.00
Holiday Pay	870.00
Contractual Services	20,700.00
Materials & Supplies	4,450.00
Services of Other Departments	4,999.00
	$190,144.00

PAYROLL DIVISION

For the fiscal year 1959-60, the Payroll and Personnel Division of the Bureau of Accounts prepared and processed a total of 1,457 timerolls involving an expenditure of $10,362,144.90. There was a total of 1,595 permanent employees. Included in this payroll expenditure is a substantial amount for temporary employments; there being 290 requisitions for temporary employees. There was a total of 193 requisitions for permanent civil service employees to replace vacancies due to deaths, resignations, transfers, retirements, etc. However, because of difficulty in recruiting civil service employments, it was necessary to employ 475 non-civil service employees for these authorized positions. The inter-relationship of personnel records to the preparation of these payrolls necessitated 2,379 reports to the Department physician of new cases of illness to verify legitimacy of sick pay as required by Ordinance. There were also 217 accident reports filed with the necessary follow-up procedures required which are not included in the reports to the Department physician.

I.B.M. DIVISION

The I.B.M. Division of the Bureau of Accounts is currently reporting labor costs for the Bureau of Building Repair on a daily basis, and job costs on a monthly basis involving 8,400 transactions.

The job costing for the Bureau of Architecture and the Bureau of Engineering is done weekly with an average volume of 800 and 1,100 transactions respectively.

All payroll distributions for the three bureaus mentioned above, involving 6,500 labor cards, are processed semi-monthly.

Time cards for the Bureaus of Architecture, Building Repair, Sewer Repair, Street Cleaning and Street Repair require 18,138 labor cards a month.

Reports on curb painting, pavement painting and traffic accidents are submitted monthly, quarterly, semi-annually and annually for the Bureau of Traffic Engineering. There are 40,000 of these items a year, plus an inventory of traffic and parking signs totalling approximately 38,000 located throughout the City.

A perpetual inventory is kept of the materials stores revolving fund in which there are recorded some 2,000 stock items. Each month, 3,500 transactions are recorded and priced.

Automotive equipment in the Department requires 3,000 gasoline and oil tags each month, which are summarized by vehicle number and bureau. Monthly repairs and mileage are combined with these for semi-annual reports.

Statements are prepared monthly for each bureau in the Department showing the allowances, encumbrances and expenditures for each object of expenditure in their respective budgets. Some 16,000 transactions per year are reflected.

To relieve the burden on the type 402 I.B.M. Accounting Machine, the larger type 407 was ordered, and replaced the smaller 402 in April, 1959. Since its installation, financial reports have been designed which give more information much faster due to the larger capacity and faster speed of the new equipment. Also of significance is the savings of costs in forms required and set-up time, as this machine can label each report, eliminating the constant changing of the more costly printed forms.

PURCHASING DIVISION

During the fiscal year 1959-60, the Purchasing Section of the Bureau of Accounts processed 6,273 requisitions for purchase orders and/or revolving fund orders in the total amount of approximately $1,716,645.86 involving 26,500 items. Outside purchases from vendors also brought about the issuance of 5,729 delivery orders involving the delivery of 43,095 items, and 105 requisitions on the storekeeper involving 1,575 items.

For the supplying of materials for the varied activities of the Department, a sub-storeroom and a material yard are conducted, through which 25,256 transactions were handled, involving the delivery of 92,871 items to jobs. Stores inventory on hand as of June 30, 1960 amounted to $72,982.72.

ACCOUNTING DIVISION

The Accounting Section of the Bureau handled the fiscal processing of 181 formal contracts during the year, covering street improvements, sewers, and sewage treatment plants, schools, hospitals, fire houses, and various projects for other City departments under programs which are expected to continue into subsequent years, as follows:

	Number of Contracts	Amount
Special Gas Tax Street Improvement Fund	5	$ 1,037,733.03
Special Road Improvement Fund	20	570,633.59
Candlestick Park Stadium	1	264,245.00
General Fund - Public Buildings	39	814,632.82
San Francisco Unified School District	56	846,799.10
1944 Sewer Bond Fund	2	18,377.00
1947 Street Improvement Bond Fund	8	96,006.60
1948 Sewage Treatment Bond Fund	2	164,023.05
1952 Firehouse Bond Fund	2	252,111.00
1954 Sewer Bond Fund	13	838,739.45
1954 Exhibit Hall Bond Fund	3	499,302.11
1954 Laguna Honda Home Bond Fund	1	25,000.00
1954 S.F. General Hospital Bond Fund	6	891,870.00
1956 School Bond Fund	12	4,310,499.00
1958 Recreation and Park Bond Fund	1	9,200.00
1959 Civic Auditorium Bond Fund	1	480,000.00
M. H. de Young Memorial Museum	4	51,528.00
Legion of Honor	1	9,038.00
War Memorial	2	56,342.81
Public Utilities	2	11,060.09
TOTAL	181	$11,247,140.65

In addition to the above, 84 informal bids were processed, as follows:

Public Buildings	$ 40,033.12
Schools	15,231.00
Special Gas Tax Street Improvement Fund	5,089.00
Special Road Improvement Fund	14,082.50
Art Museum	1,394.00
Candlestick Park Stadium	158,899.35
de Young Museum	1,310.00
Street Improvement Bond Fund	39,215.00
	$275,253.97

Job costs pertaining to damages to City Property under the jurisdiction of the Department are compiled and forwarded to responsible for collection. These costs amounted to $12,077.75 for the fiscal year and embraced 332 cases.

BUREAU OF ACCOUNTS

Interdepartmental Service Under Work Order Procedure For:

Schools	$ 795,965.34
Recreation - Park	19,919.48
Maintenance and Repair - Public Buildings	1,033,199.78
Replacement and Reconstruction - Public Buildings	148,330.43
Candlestick Park	341,724.40
Capital Improvements	136,366.75
Special Gas Tax	1,697,408.26
Special Inspection	23,341.64
State Highways	4,712.05
Miscellaneous	13,411.03
1947 Street Improvement Bonds	148,702.11
1944 Sewer Bonds	24,576.59
1954 Sewer Bonds	828,674.00
1948 Sewage Treatment Bonds	165,518.71
1948 School Bonds	13,736.84
1956 School Bonds	223,407.84
1954 Laguna Honda Home Bonds	34,956.93
1954 San Francisco Hospital Bonds	988,538.83
1952 Firehouse Bonds	8,857.98
1954 Exhibit Hall Bonds	528,958.38
1955 Playground and Recreation Center Bonds	2,068.86
1956 Hall of Justice Bonds	87,912.07
1956 Airport Bonds	272.88
1958 Park - Recreation Bonds	6,180.23
1959 Civic Auditorium Bonds	5,432.05
Parking Authority of San Francisco	665.14
Bay Area Rapid Transit Survey	4,043.38
Redevelopment Agency	16,367.09
War Memorial	13,277.45
Art Museum	2,231.24
de Young Museum	30,183.58
Legion of Honor	7,782.60
Engineering	2,925.52
Public Utilities	21,448.91
Publicity and Advertising	3,898.52
Special Road Improvement	738,862.05
Department of Electricity	8,200.00
Street Cleaning - State Highways	43,039.66
State Highway - Repairs	5,104.76
TOTAL INTERDEPARTMENTAL SERVICE	$8,180,203.36

SUMMARY OF TRANSACTIONS

Budgeted Funds, Subject to Control and Appropriated to:

BUREAU	BUDGET 1958-59	BUDGET 1959-60	EXPENDITURES 1958-59	EXPENDITURES 1959-60
GENERAL FUND				
General Fund	173,273	176,019	166,267	172,734
General Office - Improvements	1,130,768	532,872	629,660	702,350*
Architecture	533,551	619,407	496,428	536,217
Building Inspection	586,921	686,534	570,370	652,232
Engineering	502,822	552,579	498,458	536,576
Central Permit	50,906	54,300	50,790	53,188
Accounts	186,017	193,059	178,927	190,144
Building Repair	2,994,698	3,258,001	2,327,459	3,153,890**
Traffic Striping	203,020	202,842	200,130	199,138
Street Cleaning	2,184,803	2,350,923	2,179,442	2,327,433
Sewer Repair	965,814	1,013,621	985,396	1,055,383
Sewage Treatment Plants	1,058,020	1,073,099	1,027,543	1,037,607
Sewage Pumping Stations	111,338	120,233	109,196	116,000
SPECIAL ROAD IMPROVEMENT FUND				
Street Repair	1,649,241	1,673,987	1,634,889	1,608,797
Bridges and Tunnels	173,704	174,555	167,816	167,809
Street Tree Planting	142,602	155,215	135,239	150,138
Traffic Engineering	454,889	602,096	532,667	576,633
Traffic Signal Maintenance	292,586	232,404	200,861	207,781
Engineering Administrative	99,265	72,929	88,618	67,271
Maintenance and Reconstruction	59,000	291,271	130,582	163,888 /
Construction	1,347,101	2,243,285	1,380,907	1,343,560 #
SPECIAL GAS TAX STREET IMPROVEMENT				
Maintenance	359,150	371,000	275,076	350,898
Construction	778,150	3,012,000	3,704,220	2,801,522 ø
TOTALS	16,037,639	19,662,231	17,670,941	18,171,189

* - Expenditures of $566,463 from funds budgeted in prior years.
** - Expenditures of $538,695 from funds budgeted in prior years.
/ - Expenditures of $64,394 from funds budgeted in prior years.
# - Expenditures of $1,169,028 from funds budgeted in prior years.
ø - Expenditures of $2,450,692 from funds budgeted in prior years.

CENTRAL PERMIT BUREAU

Sidney Franklin, Supervisor

FUNCTIONS

The principal function of the Central Permit Bureau is the issuance of all permits under the jurisdiction of the Department of Public Works, and the collection of the fees required therefor. This includes permits for the erection, alteration, demolition and moving of buildings (as well as the subsidiary permits in connection therewith), permits for all types of billboards and signs, and permits involving the use or excavations of streets and sidewalks. All plumbing, gas appliance and electrical permits are now also issued in this bureau.

It is the duty of the staff of the Central Permit Bureau to receive applications for these various types of permits, route them for processing, issue the permits when the applications are properly approved, and collect the necessary fees.

The Central Permit Bureau is the custodian of all public records relevant to permits issued by the Department of Public Works, and of all plans and specifications in conjunction with these permits. These records date back to the 1906 Earthquake and are assuming more importance each year in determining the status of buildings affected by our slum clearance program.

Another service performed in this bureau is the assignment of street addresses to all new buildings and the elimination of possible confusion resulting from improper existing numbers. Our official house number records are constantly referred to by realtors, title insurance companies, etc., when the correct street numbers for buildings must be obtained.

It is also the duty of the Central Permit Bureau to render bills for all claims for damages to property under the jurisdiction of the Department of Public Works, and for costs in excess of deposits in the installation of side sewers. The moneys collected from these bills, as well as all other receipts of the department, are cleared through this bureau for deposit in the proper funds in the City Treasury.

THE FOLLOWING TABLES ILLUSTRATE THE SCOPE OF THE ACTIVITIES OF THE

CENTRAL PERMIT BUREAU

TABLE I

PERMITS ISSUED AND FEES RECEIVED

	1959-60		1958-59	
	Permits	Fees	Permits	Fees
Buildings	11,145	$ 288,719	11,404	$ 260,777
Billboards	149	523	164	568
Demolitions	337	3,500	431	2,470
Boiler Installations	144	1,120	54	337
Boiler Inspections	882	5,645	537	4,151
Street Space *	876	59,638	1,369	49,629
House Numbers	855	3,498	925	3,590
House Moving	77	1,540	146	2,620
Excavations (Public Utilities, etc.)	9,818	26,008	10,340	29,028
Excavations (Exclu. of Util.)*	750	3,804	796	3,880
Flue Registrations	65	1,300	59	1,160
Flues - New Buildings	37	93	28	70
Flues - Old Buildings	82	280	64	196
Flues - New Buildings, Coupons	3,450	1,725	2,950	1,475
Flues - Old Buildings, Coupons	250	500	300	600
Posting Notices	793	2,080	834	2,261
Flower Markets	39	1,284	39	1,260
Advertising	14	1,937	15	2,506
Surveys	40	24,190	37	23,160
Engineering Inspections	62	29,445	74	33,418
Electrical Inspections	17,070	120,534	17,168	110,749
Sign Inspections	Included in Elec. Insp.	5,977	Included in Elec. Insp.	6,979
Electrical Sales	2,246	22,655	2,319	22,927
Plan Checking	5,503	65,937	6,463	65,228
Architect's Investigation	67	1,005	132	1,845
Garage Door Coupons	550	1,650	800	2,400
Hearings for Substitute Materials	9	1,210	10	1,220
Plumbing Inspections	16,972	59,874	22,064	57,852
Gas Appliance Inspections)	Included in Plbg. Insp.	14,329	Included in Plbg. Insp.	13,650
Journeyman Plumber's License)		1,710		192
Gas Appliance Dealers)		670		120
TOTAL - TABLE I	72,282	$ 752,380	79,522	706,318
TOTAL - TABLES II & III	2,503	5,666,516	2,674	5,460,101
GRAND TOTAL - Permits & Revenue	74,785	6,418,896	82,196	6,166,419

* - Permits and Fees only.
See Table II for Refundable Deposits.

TABLE II

MISCELLANEOUS DEPOSITS

	1959-1960		1958-1959	
REFUNDABLE DEPOSITS	Permits	Deposits	Permits	Deposits
Street Space	*	$ 21,911	*	$ 18,750
Subsidewalks	-	-	1	1,720
Deposit on Plans	1,629	83,080	1,715	145,957
Excavations	*	914	*	946
PARTIALLY REFUNDABLE DEPOSITS				
Side Sewers	696	$306,419	665	$257,875
Excess Costs - Side Sewers	43	4,405	69	4,924
TOTAL RECEIVED	739	$310,824	734	$262,799
AMOUNT REFUNDED		$133,751		$ 92,488
Net Revenue applied or to be applied to Installation Costs		$177,075		$170,311
AGENCY DEPOSITS				
Street Improvement Bonds	135	$ 16,802	224	$ 10,448
TOTAL	2,503	$433,531	2,674	$440,620

* - Street Space and Excavations require both a Fee and a Deposit. Amounts shown are Deposits only.

TABLE III

MISCELLANEOUS REVENUE

	1959-1960 REVENUE	1958-1959 REVENUE
General Fund	$ 80,862	$ 51,974
Special Road Improvement Fund	2,895,266	2,878,920
Highway Trust Fund	20,578	20,766
Special Gas Tax - Street Improvement Fund	2,230,387	2,060,578
San Francisco Unified School District Fund	2,165	21
San Francisco Water Operating Fund	-	6,597
1947 Street Improvement Bond Fund	-	625
1954 Laguna Honda Home Bond Fund	447	-
1954 Sewer Bond Fund	3,280	-
TOTAL	$5,232,985	$5,019,481

TABLE IV

STATEMENT OF CONDITION SPECIAL FUNDS AS OF JUNE 30, 1960

	Balance June 30, 1959	Deposits 1959-1960	Refunds 1959-1960	Balance June 30, 1960
Special Permit Fund (St. Space and Subsidewalk Dep.)	$24,960.00	$21,911.00	$15,510.00	$31,361.00
Street Improvement Fund (Payments of Street Improv. Bonds)	465.27	-	-	465.27
Excavation Fund	2,313.20	913.50	1,057.50	2,169.20
Deposits on Plans	11,973.00	83,080.00	74,240.00	20,813.00

PERSONNEL

The personnel of the Central Permit Bureau, as of June 30th, 1960, was as follows:

- 1 Supervisor
- 1 Cashier
- 2 Senior Clerks
- 1 General Clerk-Stenographer
- 5 General Clerk-Typists

APPENDIX I

BUREAU OF ENGINEERING CURRENT CONTRACT DATA SUMMARY

Showing All Contract Work Awarded or Underway

July 1, 1959 - June 30, 1960

Table	Type of Construction	No.	Contracts Awarded Aggregate Value	Amount Expended Fiscal Year 1959 - 1960
A	Major Thoroughfares	4	1,307,291.08	1,031,785.46
B-1	Streets - Private Contracts	26	2,620,327.10	670,342.00
B-2	Streets - Assessment Proceedings	15	512,785.51	606,906.74
B-3	Streets - Public Contract City Pay	10	464,555.40	505,775.03
B-4	Streets - Car Track Removal	2	30,186.00	436,398.84
C	Traffic Signals & Channelization	7	201,956.05	195,548.40
D-1	Sewers - Pipe Vitrified Clay & Concrete	5	678,195.55	182,108.02
D-2	Sewers - Concrete, Monolithic	3	356,969.97	519,166.17
E	Miscellaneous	41	634,338.99	677,286.81
	TOTALS	113	6,806,605.65	4,825,317.47

TABLES

On the following pages appear separate tables of Current Contracts for each of the types of construction listed above. The source of the Funds used to finance each project is indicated in the Tables according to the following:

Abbreviation Legend

Designation	Description of Fund
General	General Fund City and County
Spec. Rd.	Special Road Improvement Fund
Major Sts.	Special Gas Tax Improvement Fund
Assmt. Proceedings	Assessed to Property Benefiting under the Street Improvement Ordinance of 1934
Pd. Prop. Owners	Cost Borne by Property Owners under Private Contract
1944 Sewer Bd.	Bond Issue Voted by Citizens on Nov. 7, 1944 - $12,000,000
1947 St.Imp.Bd.	Bond Issue Voted by Citizens on Nov. 4, 1947 - $22,850,000
1948 Sewage Tr. Bd.	Bond Issue Voted by Citizens on June 1, 1948 - $15,000,000
1954 Sewer Bd.	Bond Issue Voted by Citizens on June 8, 1954 - $12,645,000
1947 Off St. Park. Bd.	Bond Issue Voted by Citizens on Nov. 4, 1947 - $ 5,000,000
1954 Lag. Hda. Bd.	Bond Issue Voted by Citizens on Nov. 2, 1954 - $ 5,475,000
D of E	Department of Electricity Funds
Muni Rwy.	Municipal Railway Funds
South Pac.	Portion of Work Paid by Southern Pacific Co.

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
A - MAJOR THOROUGHFARES					
Portola Dr. - Twin Peaks Blvd. to Sloat Blvd. (Widening & Realignment) Chas. L. Harney, Inc.	11-6-57	6-1-59	$1,007,808.34	$169,793.34	Major St. Spec.Rd.Imp. 1954 Sewer Bd.
Geary Blvd. - Presidio Ave. to 33rd Ave. (Pvt. Reconstr.& Tr. Remov.) Chas. L. Harney, Inc.	1-17-58	4-2-59	1,419,150.23	216,400.23	1947 St.Imp.Bd.
Jamestown Ave. - Ext. & Other Acc. Rds. to Stadium (Grading) Chas. L. Harney, Inc.	4-18-58	11-20-59	1,449,759.44	198,359.44	1947 St.Imp.Bd.
Ingerson Ave. - Hawes St. to E. of Griffith St. (Viad.,Paving Sewers) Chas. L. Harney, Inc.	8-18-58	8-31-59	195,375.05	28,245.05	1944 Sewer Bd. Spec.Rd.Imp.
Jamestown Ave. - Gilroy St. to Hunters Pt. Serv.Rd.(Pvt.,Sewers) The Fay Improvement Co.	9-24-58	11-17-59	73,092.82	44,292.82	1944 Sewer Bd. Spec.Rd.Imp.
Twin Peaks Blvd. - Clarendon Ave. to Clayton St.(Widening) Chas. L. Harney, Inc.	7-31-59	1-29-60	95,157.05	95,157.05	Spec.Rd.Imp.

South Access Rd. for S.F. Municipal Stadium (Pvt. Constr. & Other Fac.) Chas. L. Harney, Inc.	7-22-59	11-27-59	62,937.53	62,937.53	1947 St.Imp.Bd.
Geary Expressway Underpass at Fillmore St.(Constr.) Chas. L. Harney, Inc.	12-2-59	21%	981,889.00	216,600.00	Major Sts. Spec.Rd. 1947 St.Imp.Bd. 1944 Sewer Bd. General Muni Rwy.
Brotherhood Way -Junipero Serra - Lake Merced (Realign,Overpass, Landscape) Chas. L. Harney, Inc.	6-24-60	0	167,307.50	0	1954 Sewer Bd. Major Sts. D. of E. Funds
Total Awarded and Expended During Fiscal Year			$1,307,291.08	$1,031,785.46	

CURRENT CONTRACT DATA 1959-1960

Street or Subdivision	Impvts	Contractor	Awarded	Completed	Contract Amount
B-1 STREETS - PRIVATE CONTRACTS - PD. PROP. OWNERS					
Perego Heights Subdiv. Contract #1	S	T. D. Harney	10-23-57	1-5-60	$ 10,000.00
Forest Knolls Subdiv No. 1 Contract #4	C,P,Gr.	Gellert Bros.	2-21-58	7-28-59	8,000.00
Ankeny St. - Mill St. - Bishop St. (E. Line) Mill St. - Ankeny St. - 60' S	Gr.	The Fay Impr.Co.	9-17-58	2-26-60	4,000.00
Perego Heights Subdiv. Contract #2	C, P	T. D. Harney	9-19-58	10-12-59	5,000.00
Army St. - 218' E. Castro St. - 443' E. Castro St.	Gr.	The Fay Impr.Co.	9-24-58	4-26-60	1,200.00
Midtown Terrace No. 6 - Contract #3	Stwy - Wlkwy	Gellert Bros	12-3-58	10-8-59	1,500.00
Leidesdorff St. - Sacramento St. - Halleck St.	C, P	Cahill Const.	12-17-58	11-4-59	4,300.00
Alder St. - Ankeny St. - 225' N. Harkness	Gr.	The Fay Impr.Co.	12-19-58	0%	2,000.00
Verna St. - 300' N.- 357' N. Teresita Blvd.	S, C, P	The Fay Impr.Co.	1-16-59	7-3-59	1,640.00

Battery St. - Bush St. - Market St.	Reloc.S	Lowrie Paving Co.	2-6-59	10-12-59	6,500.00
Forest Knolls No. 2 Contract #2	C, P	Gellert Bros.	3-4-59	11-12-59	30,000.00
*Underwood Ave. - Jennings St. - Ingalls St.	C, P	The Fay Impr.Co.	4-22-59	11-4-59	16,000.00
Forest Knolls No. 3	S, C, P	Gellert Bros.	5-1-59	11-30-59	66,000.00
Thomas Ave. N. End	Recons.	Cahill Constr.	5-15-59	8-18-59	1,100.00
Yosemite Ave. - Ingalls St. - Jennings St.	C, P	The Fay Impr.Co.	5-15-59	11-4-59	22,000.00
Ingalls St. - Armstrong Ave. - Yosemite Ave.	C, P	The Fay Impr.Co.	5-15-59	9-17-59	5,000.00
Miraloma Park No. 10 Contract #4	C, P	Gellert Bros.	6-5-59	7-28-59	16,200.00
Berry St. - 3rd St. - 4th St.	C,Sw	Lowrie Paving Co.	6-12-59	7-2-59	3,000.00
Battery St. - Market St. - Bush St.	C, P	Haas & Haynie	6-24-59 - - - -	9-30-59	15,000.00 - - - - -
14th Ave. - 100' - 400' N. of Rivera	Grading	A. Malerbi Sand Co.	8-14-59	0%	5,000.00
Stevenson and 9th Sts.	Recons.	Plant Bros.Corp.	8-21-59	2-26-60	3,000.00
Raymond Ave. (S½) - Elliot St. - Sawyer St.	S,C,P	The Fay Impr.Co.	9-18-59	11-27-59	10,600.00
Mariposa St. (S.Side) at Wisconsin St.	C,Sw	Louis C. Dunn, Inc.	10-9-59	10-21-59	1,000.00

CURRENT CONTRACT DATA 1959-1960

Street or Subdivision	Impvts	Contractor	Awarded	Completed	Contract Amount
*Peralta Ave. (Portions) - Esmeralda Ave. - Mayflower St.	C, P	Pacific Pvts.Ltd.	10-21-59	1-5-60	$ 4,500.00
Custer Ave. - Quint St. - Rankin St.	S	Theo.G.Meyer & Sons	10-30-59	1-10-60	9,000.00
Hayes St.- Stanyan St. - Shrader St.	C,P,Sw	Barrett Const.Co.	11-20-59	12-8-59	1,000.00
Egbert Ave. - E. of Jennings St.	Grdg. S,C,P	The Fay Impr.Co.	12-9-59	5-9-60	6,000.00
Carver St. - 53' N. of Powhattan Ave.	S	The Fay Impr.Co.	12-9-59	1-5-60	1,890.00
Anza St. - S. Line Anza to 38' N.	S	Chas.L.Harney	12-16-59	12-16-59	1,000.00
Modoc Ave. - 175' N.W. - 30' N.W. Cayuga Ave.	Grdg. S,C,P	E. J. Treacy	12-23-59	4-26-60	1,720.00
Hudson Ave. - 8" Sewer across Lot 7A Blk 4646	Encase	Chas.Kay & Assoc.	12-30-59	3-24-60	1,000.00
Bright St. - Alemany Blvd. - 70' N. Palmetto Ave.	Grdg. S,C,P	The Fay Impr.Co.	1-15-60	4-12-60	2,685.00
Armstrong Ave. - Jennings St. - Ingalls St.	Grdg. S,C,P	The Fay Impr.Co.	1-22-60	40%	27,250.00
*Cresta Vista Drive - Lulu Alley - Globe Alley	Grdg. S,C,P Ltg.	Gellert Bros.	2-24-60	20%	37,800.00

DIAMOND HTS. REDEV. AREA B-1	Gr.,S, C,P,Ltg, Stwy,Walls, Landscp	Guy F. Atkinson	3-1-60	17.5%	2,417,297.10
Ulloa St. - 137' W. of W/L Waithman - 72' E.	S	Lowrie Paving Co.	3-4-60	0%	1,650.00
Foerster St. - Easement N. of Melrose Ave.	S	Gellert Bros.	3-25-60	50%	5,500.00
Rolph St. Ext. - Crocker Amazon #3	Grdg. S,C,P	Gellert Bros.	3-30-60	80%	9,750.00
New Street - E. 25th St. - S.Vicente St.	Grdg. S,C,P, Wall	Thos.E.McCormick	4-13-60	0%	6,000.00
Kearny St. - S/L - 130' S.Francisco St.	S	Lowrie Paving Co.	5-6-60	0%	3,865.00
Southern Hills Subdiv. No.1	S	Gellert Bros.	5-20-60	90%	48,000.00
Balboa St. - Crossing of La Playa	S	The Fay Impr.Co.	6-8-60	0%	1,000.00
Lawton Hts. Service Rd.	S	Gellert Bros.	6-8-60	6-29-60	5,500.00
Wayland St. - Cambridge St. to Yale St.	Grdg. S,C,P	The Fay Impr.Co.	6-10-60	0%	6,500.00
Guttenberg St. - Hanover St. - Bellevue Ave.	S	The Fay Impr.Co.	6-15-60	0%	1,820.00
Total Awarded During Fiscal Year					$2,620,327.10
Total Value of Work Done During Fiscal Year					$ 670,342.00

S = Sewers; C = Curb; P = Paving; Gr, Grdg = Grading; Sw = Sidewalk;
Ltg. = Lighting; Stwy = Stairs

*Remaining Portions Improved under Public Contract

CURRENT CONTRACT DATA 1959-1960

Street or Subdivision	Impvts	Contractor	Awarded	Completed	Contract Amount
B-2 - STREET ASSESSMENT PROCEEDINGS					
Burnett Ave. - Hopkins Ave. - Existing Pvt. S	C, P	The Fay Impr.Co.	6-27-58	7-24-59	$ 79,523.72 (7,139.62)
Clarendon Ave. - Stanyan St. - Laguna Honda Blvd.	S,C,P	Chas.L. Harney,Inc.	10-3-58	99%	207,280.50 (180,568.90)
Yosemite Ave. - Keith St. - Jennings St.	C, P	Chas.L. Harney, Inc.	11-19-58	5-29-59	13,100.68 (6,550.34)
Jennings St. - Van Dyke Ave.- Carroll Ave.	S,C,P	The Fay Impr.Co.	11-19-58	7-7-59	65,096.85 (32,613.09)
Bonview St. - 83' to 450' S. Coso Ave.	S,C,P	M. J. Lynch	3-25-59	11-3-59	12,816.45 (3,475.98)
*Underwood Ave. (N½) - Jennings St. - 300' E.	C, P	The Fay Impr.Co.	4-17-59	11-4-59	5,396.32 (819.18)
Burnett Ave. - Hopkins Ave. - Dixie Alley	S,C,P	Chas.L.Harney,Inc.	4-22-59	11-4-59	21,057.94 (6,724.52)
Allison St. (W½) - Brunswick St. - 25' S.	Sw	MAC Constr. Co.	5-20-59	11-10-59	18,389.20 (None)
Twelfth Ave. - Taraval St. - 432' N. Funston Ave. - Taraval St. - 530' N.	C, P	Chas.L.Harney,Inc.	5-20-59	2-12-60	18,281.30 (9,205.96)

Jamestown Ave. - Ingalls St. - Gilroy St.	S,C,P.	Chas.L.Harney,Inc.	6-12-59	10-2-59	$ 88,915.90 (55,286.00)
Mangels Ave. - Detroit St. - 125' W.Edna St.	S, C,P	Chas.L.Harney,Inc.	6-24-59	99%	30,927.40 (14,000.00)
Christopher Dr. - Clarendon Ave. - Crestmont Dr.775'W.	S,C,P	Chas.L.Harney,Inc.	6-24-59 -------	99%	57,208.40 ----------- (29,000.00)
Melrose Ave. - Gennessee St.- Foerster St.	S,C,P	Chas.L.Harney,Inc.	8-7-59	99%	18,502.30 (7,300.00)
Mansell St. - San Bruno Ave. - University St.	Wid. S,C,P	The Fay Impr.Co.	10-9-59	70%	316,994.85 (306,722.88)
Ignacio Ave. - Gilroy St. - 277' E.	S	R. E. Bryan	10-7-59	12-11-59	2,502.44 (437.51)
*Peralta Ave. (Portions) - Esmeralda Ave. - Mayflower Ave.	C, P	Pacific Pvts.Co.	10-21-59	1-5-60	1,118.32 (368.22)
Raymond Ave. - Sawyer St. W. End	S,C,P	The Fay Impr.Co.	12-9-59	50%	20,921.80 (17,500.00)
Los Palmos Dr. - Foerster St. - Stanford Hts.Ave.	C, P	The Fay Impr.Co.	12-23-59	70%	15,498.00 (8,200.00)
*Cresta Vista Dr. - Lulu Alley Globe Alley	C, P	Gellert Bros.	2-24-60	20%	17,038.80 (13,600.00)

CURRENT CONTRACT DATA 1959-1960

Street or Subdivision	Impvts	Contractor	Awarded	Completed	Contract Amount
Campbell Ave. - Somerset St. - Alpha St.	S,C,P	John F.Coughlan	2-24-60	40%	15,014.20 (12,300.00)
Powhattan Ave. - Peralta Ave.- Franconia St.	Gr.C,P	E. J. Treacy	3-16-60	50%	4,308.00 (3,000.00)
Innes Ave. - Phelps St. - 3rd St.	Grdg S,C,P	Pacific Pvts.Co.	3-25-60	10%	14,939.75 (5,000.00)
Orizaba Ave. - Garfield St. - Lakeview Ave.	S,C,P	Chas.L.Harney,Inc.	3-30-60	0%	29,511.30 (19,500.00)
Ordway St. - Girard St. - Brussels St.	Grdg S,C,P	The Fay Impr.Co.	4-20-60	0%	11,187.60 (8,000.00)
Mayflower St. - Crossing of Peralta Ave.	Grdg C, P	Pacific Pvts.Co.	6-15-60	0%	1,955.00 (800.00)
Dalewood Way in Sherwood Forest Subd. 2	Grdg S,C,P	Gellert Bros.	6-15-60	0%	33,610.15 (2,400.00)
Army St. - Castro St. 218' = 438' E.	Grdg S,C,P	The Fay Impr.Co.	6-15-60	0%	9,683.00 (3,600.00)
Total Awarded During Fiscal Year					$512,785.51

Total Value of Work Done During Fiscal Year $606,906.74

(   ) = Estimated or Final Amount of City Obligation. Balance through Assessment of Property Benefited. City Funds from Special Road Improvement Fund.

S = Sewers
C = Curb
P = Paving
Gr.or Grdg = Grading
Sw = Sidewalk
Widen. = Widening

* Remaining Portions Improved under Private Contract.

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
B-3 STREETS - PUBLIC CONTRACT CITY PAY					
S.F.Muni.Stad.West Access Rd. & Ingerson Ave. (Pvt. & Sewers) Chas. L. Harney, Inc.	10-8-58	8-31-59	$ 44,746.21	$ 6,255.21	1944 Sewer Bd. Spec.Rd.Imp.
Tompkins Ave.(S½) - Putnam St. to Bronte St. (Curb & Paving) The Fay Improvement Co.	2-4-59	6-22-59	3,695.50	3,695.50	Spec.Rd.Imp.
Chapman St. - Carver St. to Folsom St. (Curb, Paving, Wall) The Lowrie Paving Co.	2-18-59	10-22-59	14,241.48	6,423.48	Spec.Rd.Imp.
Lake St. at 3rd Ave. (Curb & Pvt. Repl.) The Lowrie Paving Co.	4-24-59	7-21-59	1,829.03	1,829.03	Spec.Rd.Imp.
Hunters Pt.Service Rd. - Jamestown to Gilman (Drainage & Paving) Chas. L. Harney, Inc.	6-3-59 - - - -	8-31-59	61,501.41 - - - - - -	56,801.41	Spec.Rd.Imp.
Ahern Way - 6th - Harriet St. (Construction) M & K Corporation	7-1-59	12-14-59	11,716.71	11,716.71	Spec.Rd.Imp.

Pacific Ave. & Other Streets (Resurfacing) The Lowrie Paving Co.	7-10-59	3-23-60	183,274.01	183,274.01	Major St.
McKinley Ave. Extension Candlestick Rd. - South Access Rd. (Paving,Fence,Lgts) Chas. L. Harney, Inc.	7-1-59	12-3-59	21,296.29	21,296.29	Spec.Rd.Imp.
Fitch and Carroll Ave. (Surf. & SFWD Mains) The Lowrie Paving Co.	7-1-59	9-30-59	27,665.77	27,665.77	Spec.Rd.Imp. SFWD
Raymond Ave. ($N\frac{1}{2}$) - Elliot St. - Sawyer St. (Curb - Paving) The Fay Improvement Co.	9-18-59	11-27-59	9,328.32	9,328.32	General
Sunset Blvd. & Other Streets (Resurf.) The Lowrie Paving Co.	1-29-60	6-23-60	112,833.74	112,833.74	Major St. Spec.Rd.Imp.
Pavement Reconstruction on Various Streets (Curb,Paving,Sewer) Chas. L. Harney, Inc.	3-9-60	93%	49,390.00	46,100.00	Spec.Rd.Imp. 1944 Sewer Bd.
Candlestick Park Access Rds. (Resurf.) Pacific Pavements Co.	3-30-60	4-18-60	10,389.63	10,389.63	1947 St.Imp.Bd.
Lakeshore Distr. Streets (Slurry Seal) Chas. L. Harney, Inc.	4-27-60	6-17-60	8,165.93	8,165.93	Major St.
Sacramento St. Pavement Reconstr.(Curb,Paving) The Lowrie Paving Co.	6-22-60	0%	30,495.00	0	1947 St.Imp.Bd. Spec.Rd.Imp.
Total Awarded and Expended During Fiscal Year			$464,555.40	$505,775.03	

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
B-4 STREETS - CAR TRACK REMOVAL					
B Line - Geary Blvd. to Great Highway (Tr.Rem., Pvt.Rec.,Brick Rem.) Chas. L. Harney, Inc.	3-11-59	1-14-60	$224,613.55	$224,613.55	1947 St.Imp.Bd. Spec.Rd.Imp. Major St.
Geary St. - Market to Franklin St. (Tr.Rem. & Pvt. Rec.) Pacific Pavements Co.	6-10-59	11-16-59	181,599.29	181,599.29	1947 St.Imp.Bd. Muni Rwy.
	- - - -		- - - - - -		
Balboa St. - 29th Ave. to 31st Ave. (Tr.Rem. & Pvt. Rec.) Pacific Pavements Co.	10-23-59	12-8-59	7,087.48	7,087.48	1947 St.Imp.Bd.
17th St. - Hampshire St.- Potrero Ave. Mariposa St. - Hampshire St. - Potrero Ave. (Tr.Rem. & Pvt. Rec.) Chas. L. Harney, Inc.	11-27-59	1-29-60	23,098.52	23,098.52	1954 Sewer Bd. 1947 St.Imp.Bd. Spec.Rd.Imp.
Total Awarded and Expended During Fiscal Year			$ 30,186.00	$436,398.84	

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
C TRAFFIC SIGNALS AND CHANNELIZATION					
Market St. - The Embarcadero to 10th St. (Signals & Channel.)#4 Abbett Electric Corp.	2-13-59	9-10-59	$ 34,137.25	$ 21,537.25	Major St.
Traffic Signals at Isolated Crossings - 17th Cont. (Install) R. Flatland	5-6-59	12-30-59	54,336.80	50,198.80	Major St. Spec.Rd.Imp.
Golden Gate Park and 19th Ave. (Rewire & Impr. Signals) Marshall Electric Co.	7-3-59	2-26-60	47,540.54	47,540.54	State Gas Tax Spec.Rd.Imp. Major St.
Traffic Signals at Var.Intersections Contr. 3 (Modify) Abbett Electric Corp.	7-10-59	1-21-60	37,122.00	37,122.00	Spec.Rd.Imp. Major St.
Lincoln Way at Kezar Dr. (Channel.) O.C. Jones & Sons	7-24-59	4-4-60	18,521.61	18,521.61	Major St.
Candlestick Park Access Rds. (Channel., Fence) El Dorado Fence Co.	2-10-60	4-6-60	16,540.10	16,540.10	Spec.Rd.Imp.

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
C TRAFFIC SIGNALS AND CHANNELIZATION (Cont'd)					
Market St. - 5th St. to Mason St. (Signals) Abbett Electric Corp.	4-8-60	6-30-60	$ 4,088.10	$ 4,088.10	1947 St.Imp.Bd.
Lombard St. & Richardson Ave. (Contr. & Wiring) R. Flatland	5-4-60	0%	40,625.00	0	Spec.Rd.Imp. Major St. State Hwy.
13th St. - Mission St. to S.Van Ness(Channel.) Abbett Electric Corp.	6-29-60	0%	37,518.70	0	Spec.Rd.Imp.
Total Awarded and Expended During Fiscal Year			$201,956.05	$195,548.40	

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
D-1 SEWERS - PIPE, VITRIFIED CLAY & CONCRETE					
Gilman Ave. -Griffith St. to Hunters Pt. X-way (Sewers & Paving) Chas. L. Harney, Inc.	6-27-58	8-31-59	$323,428.26	$ 38,428.26	Spec.Rd.Imp. 1944 Sewer Bd.
Griffith St. Outfall Sewer (Construction) M. J. Lynch	9-10-58	5-13-59	164,398.62	22,198.62	1954 Sewer Bd.
Newcomb St. - Rankin St. to Selby St.(Sewer Repl) The Fay Improvement Co.	4-24-59	10-7-59	19,857.59	19,857.59	1954 Sewer Bd.
Geneva Ave. Auxiliary Sewer (Construction) Dale Williams, Inc.	7-8-59	12-9-59	39,014.80	39,014.80	1954 Sewer Bd.
30th St. -Chennery St. to San Jose Ave.(Repl.) M. J. Lynch	12-30-59	5-6-60	48,827.00	48,827.00	1954 Sewer Bd.
Griffith St. -Navy Rd. to Oakdale Ave.(Constr.) Chas. L. Harney, Inc.	1-6-59	4-20-60	4,681.75	4,681.75	SF Housing Authority
Lincoln Way Sec.C -20th Ave.to 29th Ave.(Constr) M & K Corporation	4-8-60	3%	324,675.00	9,100.00	1954 Sewer Bd.
N.P.C.S. Sec.D-2 -Channel St.to Howard St.(Force Main) M & K Corporation	5-11-60	0%	260,997.00	0	1948 Sewer Bd. 1954 Sewer Bd. Southern Pacific
Total Awarded and Expended During Fiscal Year			$678,195.55	$182,108.02	

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
D-2 SEWERS - CONCRETE MONOLITHIC					
North Pt.Coll.Sewers Sec. B-2 (Constr.) Chas. L. Harney, Inc.	1-4-57	99.9%	$494,126.20	$ 83,700.00	1954 Sewer Bd.
North Pt.Coll.Sewers Sec. D-1 (Pump Sta. & Rel.Fac.) M & K Corp.	2-18-59	99%	445,448.52	398,500.00	1954 Sewer Bd.
Golden Gate Ave. - Steiner St. to Webster St.(Sewer Gunite Lining) Johnson Western Gunite Co.	4-24-59	8-7-59	9,519.20	9,519.20	General
Geary St. -Broderick St. to Steiner St. (Sewer Gunite Lining) Johnson Western Gunite Co.	8-7-59	10-9-59	27,446.97	27,446.97	General
North Point Coll.Sewers Sec. D-4 (Constr.) Walter Lenkeit	6-3-60	0%	309,129.00	0	1948 Sewer Bd. 1954 Sewer Bd.
29th St. - Sanchez to San Jose Ave. (Sewer Gunite Lining) Emsco of S.F.	6-29-60	0%	20,394.00	0	General
Total Awarded and Expended During Fiscal Year			$356,969.97	$519,166.17	

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
E - MISCELLANEOUS					
Laguna Honda Home - Incinerator (Construction) Martinelli Constr.Co.	12-11-57	7-3-59	$ 47,287.48	$ 13,237.48	General
Laguna Honda Home - Fire Alarm System(Moderniz.) Abbett Electric Corp.	10-22-58	2-12-60	29,675.00	21,275.00	General
Civic Auditorium - Hayes St.Electr.Serv.(Modif.) Hampton El. & Mfg.Co.	1-16-59	6-15-59	5,518.00	1,738.00	General
Geary St. - at Gough, Laguna & Scott Sts. (Fire Cisterns) Chas. L. Harney, Inc.	1-23-59	11-30-59	75,300.00	52,300.00	General
10th Ave. & Cabrillo St. to 9th Ave. & Irving St. (A.W.S.S. & Rel. Appurt.) Assoc. Pipeline, Inc.	2-4-59	9-8-59	69,899.06	17,899.06	General
Pacheco St. at 42nd Ave. & 3rd St. at 22nd St. (Air Raid Sirens) Mahoney Electr.Co.,Inc.	2-6-59	7-21-59	1,786.31	1,786.31	General

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
E - MISCELLANEOUS (Cont'd)					
N.P.C.S. - Sec. D & Division St. Aux.Sewer (Test Borings) P & Z Co.	2-18-59	8-28-59	$ 15,338.50	$ 4,988.50	1954 Sewer Bd.
Ashbury Tank - A.W.S.S. (Repair,Reline,& Paint) Thos.E. McCormick	3-27-59	7-3-59	7,682.00	1,742.00	General
City Hall - NE Quadrant (Replace Piping) Jesse M. Lumsden	4-3-59	8-10-59	18,093.00	3,593.00	General
City Hall - Room 57(Repl. Main Switchboard) Brayer Electric Co.	4-3-59	2-5-60	34,181.00	34,181.00	General
S.F.F.D. Engine House No.36(Htg.&Vent.System) C.S. Hardemann,Inc.	4-22-59	11-4-59	8,131.50	263.50	General
County Jail No. 2 (San Mateo County) Repair Elev. Mach.) Independent Elev.Co.	4-22-59	12-16-59	3,548.00	3,548.00	General
County Jail No. 2 (San Mateo County) (Repl. Effl.Pump Piping) Wenrick & Assoc.	4-22-59	12-16-59	12,507.00	1,977.00	General
Fort Sutter Riverboat (Demolition) Sherman Crane Serv.	5-13-59	7-10-59	8,288.00	8,288.00	General
Vicente Pumping Station (Alterations) Assoc. Pipeline,Inc.	6-3-59	10-6-59	4,750.00	4,750.00	1954 Sewer Bd.

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
E - MISCELLANEOUS (Cont'd)					
De Young Museum (Install Gas Burners) R. D. Miners, Inc.	6-24-59	10-23-59	$ 7,889.00	$ 7,889.00	General
Civic Auditorium - Polk & Larkin Halls (Repl.Lght.Fixt.) H. S. Electric Co.	7-10-59	12-21-59	6,950.00	6,950.00	General
S.F.F.D. Pump Stas.Nos. 1 & 2 - A.W.S.S. (Stand-by Gas Burners) Robt. M. Johnson	7-10-59	4-15-60	7,074.24	7,074.24	General
Dixie Alley and Market St. (Stairs,Wall,Sewers) James H. McFarland	7-15-59	2-15-60	4,840.20	4,840.20	Spec.Rd.Imp.
D.P.W. Maintenance Yard - Bldg. I (Constr. & Misc. Impr.) Chas. L. Harney, Inc.	7-17-59	1-12-60	21,159.05	21,159.05	Spec.Rd.Imp. General
Portola Dr. - W.Portal Ave. to Twin Peaks Blvd. (Landscaping) Watkin & Sibbald	7-17-59	4-19-60	37,552.12	37,552.12	Spec.Rd.Imp.
Hunters Pt.Service Rd. & Jamestown Ext. (Rdwy. Lght.) Brayer Electric Co.	7-29-59	11-27-59	11,819.00	11,819.00	Spec.Rd.Imp.

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
E - MISCELLANEOUS (Cont'd)					
Christmas Tree Pt. Radio Comm. Center(Landscp) Bernard Gayman	8-7-59	3-8-60	$ 11,415.50	$ 11,415.50	Spec.Rd.Imp.
Voting Machine Warehouse Geary Blvd.(Rec.Carbarn) C. J. Collins Co.	8-12-59	10-28-59	100,573.90	100,573.90	General
Parker Ave. (Alter Drain Fac.) Walter Lenkeit	8-19-59	12-17-59	23,267.78	23,267.78	Spec.Rd.Imp.
Geary Blvd.-Masonic Ave. to 33rd Ave.(Landscp) The Justice Co.	8-26-59	4-22-60	14,084.69	14,084.69	1947 St.Imp.Bd.
Sunnydale Ave.nr.John McLaren School(St.Lgts) Brayer Electric Co.	9-2-59	1-8-60	3,177.40	3,177.40	Spec.Rd.Imp.
Farmers Market (Add.Pvt. & Dr.Fac.) The Lowrie Paving Co.	10-7-59	12-17-59	5,757.84	5,757.84	General
Civic Auditorium-S.E.Quadrant(Repl.Roof Dr.Pipe) Bureau of Bldg.Repair	10-21-59	6-13-60	2,555.00	2,555.00	General
Bayview Park - SW of Jamestown Ave. (Fence) Anchor Post Prod.,Inc.	10-23-59	11-3-59	5,677.17	5,677.17	Spec.Rd.Imp.
El Camino Del Mar & Seacliff Ave. (Wall) M. J. Lynch	12-9-59	4-29-60	6,128.80	6,128.80	Spec.Rd.Imp.
Adult Guidance Center 150 Otis St. (Repl.Htg.Fac.) West.Plbg.& Htg.Co.	12-14-59	4-27-60	5,711.00	5,711.00	General

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
E - MISCELLANEOUS (Cont'd)					
S.E.S.T.P. - No. 2 Dryer (Reconstr.) C.J. Collins Co.	12-18-59	6-10-60	$ 24,577.84	$ 24,577.84	General
City Hall - Assessor's Office (Inst.Fluor Lts) Bureau of Bldg. Repair	1-6-60	99%	13,196.00	0	General
#54 Crane St. -(Demolition) Bureau of Bldg.Repair	1-8-60	2-28-60	2,968.00	2,968.00	General
City Hall N.W. Quadrant (Repl. Piping) H. Goldman & Sons	1-13-60	6-9-60	19,474.00	19,474.00	General
Main Public Library Circ.,Child.,& Per.Rms. (Repl. Lght.Fixt.) Decker Electric Constr. Co.	1-13-60	6-15-60	18,337.00	18,337.00	General
Presidio Branch Library (Repl.Boiler) Cornely Co.	2-5-60	99%	3,918.00	3,240.00	General
Fitzgerald Pump Station (Repl. Pump.Fac.) Bureau of Bldg.Repair	2-10-60	0%	5,268.00	0	1954 Sewer Bd.
Market St. near Corbett Ave. (Landscape) E. L. Dunn & Son	2-10-60	90%	13,321.26	10,400.00	Spec.Rd.Imp.

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
E - MISCELLANEOUS (Cont'd)					
Golden Gate Valley Branch Library(Repl.Boiler)Western Plbg. & Htg. Co.	2-10-60	4-30-60	$ 2,851.00	$ 2,851.00	General
16th St. & 6th St. Sewers (Test Borings) J. N. Pitcher Co.	2-24-60	3-25-60	2,821.90	2,821.90	1954 Sewer Bd.
Candlestick Park Ped. Controls (Constr.) El Dorado Fence Co.	3-4-60	4-11-60	55,291.58	55,291.58	General
Candlestick Park Flagpoles (Constr.) Bolander & Sons	3-4-60	4-19-60	3,506.44	3,506.44	General
Candlestick Park Illum. Exit Signs (Constr.) Brayer Electric Co.	3-4-60	4-29-60	458.50	458.50	General
R.S.S.T.P. - Sludge Control House(Repl.Exh. Vent.)Apex Sheet Metal Works	3-9-60	90%	4,993.00	4,500.00	General
Islais Creek Bridge - S.E. Fender (Repair) C. J. Collins Co.	3-11-60	4-20-60	1,444.00	1,444.00	Major Sts.
Candlestick Park Exit Stwy (Constr.) James H. McFarland	3-11-60	4-15-60	3,134.81	3,134.81	General
Ingerson Ave. Intercepting Drain (Constr.) The Lowrie Paving Co.	3-11-60	4-11-60	5,697.20	5,697.20	1947 St.Imp.Bd.
Candlestick Park Fire Protection System (Constr.) Allan Automatic Sprkler Co.	3-16-60	75%	74,099.32	54,800.00	General

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
E - MISCELLANEOUS (Cont'd)					
Islais Creek Bridge (Clean & Paint) Technacraft Co.	3-25-60	6-21-60	$ 8,385.00	$ 8,385.00	Major Sts.
Candlestick Park Traffic Control Tower (Constr.) James H. McFarland	4-27-60	33%	23,028.00	8,200.00	1947 St.Imp.Bd.
Sunset Branch Library (Repl.Ltg. Fixt.) Coopman Electric Co.	5-6-60	0%	6,034.00	0	General
Richmond & Presidio Branch Libraries (Repl. Lights) Bureau of Bldg.Repair	5-27-60	0%	13,132.00	0	General
Candlestick Park Bus Loading Area (Lights) Electric Maint.& Serv. Co.	6-1-60	0%	6,665.00	0	Spec.Rd.Imp.
Upper Market St. & Portola Dr. - Clayton to Dorchester (Landscaping) Bernard Gayman	6-10-60	0%	36,102.95	0	Spec.Rd.Imp.
Grove St. - Larkin St. to Van Ness Ave. (A.W.S.S. Ext.) M. J. Lynch	6-29-60	0%	17,890.50	0	General
Total Awarded and Expended During Fiscal Year			$634,338.99	$677,286.81	

BUREAU OF ARCHITECTURE
CURRENT CONTRACT DATA SUMMARY
Showing all Contract Work Awarded or Under Construction
July 1, 1959 - June 30, 1960

Table	Type of Construction	Contracts No.	Awarded Aggregate Value	Amount Expended Fiscal Year 1959-1960
A-1	New School Buildings	6	$4,081,150.00	$ 3,240,945.00
A-2	Misc. Alterations - Schools	56	1,114,857.00	972,883.95
A-3	Acoustical Jobs - Schools	4	15,539.00	27,680.00
A-4	Roofing Jobs - Schools	2	17,687.00	14,504.80
A-5	Resilient Flooring- Schools	3	4,195.00	11,426.04
A-6	Int.& Ext.Painting- Schools	17	194,502.00	121,130.72
A-7	Yard Paving - Schools	6	146,626.00	84,973.81
B-1	Fire Dept. - New Construction	2	259,085.00	365,712.29
B-2	Fire Dept. - Reconstruction	1	639.00	639.00
C-1	D.P.H. - S.F. Gen. Hospital	2	959,424.00	695,611.74
C-2	D.P.H. - Laguna Honda Home	8	399,250.00	480,857.44
C-3	D.P.H. - Health Center Bldg.	1	1,689.00	1,689.00
D	M H de Young Memorial Museum	5	52,838.00	119,364.00
E	Youth Guidance Center	0	0	10,222.00
F	Civic Center	5	748,822.00	247,438.76
G	Hall of Justice	0	0	6,650,074.50
H	Miscellaneous	10	125,704.81	50,862.78
	TOTALS	128	$8,122,007.81	$13,096.015.83

On the following pages appear separate tables of current contracts for each of the types of construction listed above. The source of the funds used to finance each project is indicated in the tables according to the following:

Abbreviation Legend

Designation	Description of Fund
General	General Fund City and County
District	San Francisco U.S.D. Fund
1948 School	Unified School District, bond issue voted by citizens on November 2, 1948, $48,890,000.00
1956 School	Unified School District, bond issue voted by citizens on November 6, 1956 $27,000,000.00

1952 Fire	Fire Department, bond issue voted by citizens on November 4, 1952, $4,750,000.00
1954 Hospital	Hospital, bond issue voted by citizens on November 2, 1954, $5,830,000.00
1954 L.H.H.	Laguna Honda Home, bond issue voted by citizens on November 2, 1954 $5,475,000.00
1954 Ex. Hall	Civic Center Exhibit Hall bond issue voted by citizens on November 2, 1954 $3,275,000.00
1956 Justice	New Hall of Justice bond issue voted by citizens on June 5, 1956, $19,475,000.00

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
A-1 NEW SCHOOL BUILDINGS					
Silver Avenue Jr. High (1573) Cahill Construction Co.	3-19-58	9-25-59	$1,035,542.00	$226,912.00	1956 School
Longfellow Elem. School (1646) Louis C. Dunn, Inc.	11-21-58	99%	844,000.00	540,160.00	1956 School
Francisco Jr. High Addn. (1687) Peter Sartorio	1-23-59	97%	578,000.00	508,640.00	1956 School
Geo. Washington High School (1648R) Improvement to Athletic Field Martinelli Const. Co. Inc.	3-4-59	8-27-59	107,612.00	55,907.00	1956 School
City College - Arts & Classrooms Bldg. Athletic Field, Addns. to Cafeteria- Gyms (1697) Louis C. Dunn, Inc.	4-10-59	69%	2,245,600.00	1,430,660.00	1956 School
Portola Jr. High Addn. (1717) General Construction Pacific Coast Builders	5-29-59	98%	463,500.00	454,230.00	1956 School
- -					
Jas. Denman Jr. High (1777) Connecting Corridors Stenmark Construction Co.	10-23-59	4-11-60	8,287.00	8,287.00	1948 School

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
A-1 NEW SCHOOL BUILDINGS (cont.)					
Clarendon Elem. School (1812) Site pre-grading O. C. Jones & Sons	11-18-59	2-23-60	$ 4,380.00	$ 4,380.00	1956 School
Southeast Sr. High School (1837) New Drainage gutter & sumps Stenmark Construction Co.	1-8-60	5-31-60	7,979.00	7,979.00	1956 School
Yerba Buena & Madison Schools (1835) New Storerooms Ben Bearse	2-5-60	6-15-60	3,534.00	3,534.00	District
Pacific Heights School (1839) New Fence & Retaining Wall Morlind Construction Co.	2-5-60	14%	1,829.00	256.00	District
Southwest Sr. High School (1849) Gen. Construction Pacific Coast Builders	6-24-60	0	4,081,150.00	0	1956 School
Total Awarded & Expended During Fiscal Year			$4,107,159.00	$3,240,945.00	

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
A-2 MISCELLANEOUS ALTERATIONS					
Geo. Washington Hi School - Add'l telephones to Interior Comm. System (1693R) F. A. Thomas Co., Inc.	1-23-59	7-16-59	$ 336.00	336.00	1956 School
Balboa High School - Alt. to Viewing Stand, Boys' Lockers & Shower Facilities (1640) Amoroso Construction Co.	3-13-59	12-4-59	109,670.00	86,065.00	1956 School
Horace Mann Jr. Hi School Alt. to Art Rooms & Shops (1715) Amoroso Construction Co.	4-3-59	2-17-60	73,510.00	55,576.00	1956 School
Various Schools - Alt. & conversion of Heating Plant (1727) Jack Rosen	4-24-59	65%	95,069.90	91,674.43	1948 School
Lowell High School (1730) Repairs to Fire Escapes Wm. McIntosh & Sons	5-8-59	8-14-59	6,980.00	6,980.00	District
Polytechnic High School (1709) Kitchen & cafeteria Alt. Stenmark Construction Co.	5-20-59	11-13-59	96,557.00	96,557.00	1956 School
Horace Mann Jr. High School (1731) Library, various room alt. & new Storage Bldg. Wm. McIntosh & Son	5-20-59	10-6-59	46,687.00	46,687.00	1956 School

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-60	Fund
A-2 MISCELLANEOUS ALTERATIONS (Cont.)					
B. Franklin High School (1753) Equipment installation Bureau of Building Repair	5-29-59	4-29-60	$ 1,392.00	1,392.00	District
Columbus School (1751) Window replacement Wm. McIntosh & Son	5-29-59	10-12-59	7,856.00	7,856.00	District
Herbert Hoover Jr. High School (1755) Equipment installation Wm. McIntosh & Son	6-5-59	11-15-60	1,886.00	1,886.00	District
Jefferson School (1768) Demolition of East Wing Passetti Trucking Co.	6-16-59	7-25-59	725.00	725.00	District
Roosevelt Jr. High School (1741) New Playyard & Classroom Relocation Wm. McIntosh & Son	6-17-59	12-23-59	50,478.00	50,478.00	1956 School
Relocation of portable classroom bldg. from Frederic Burk to new location (1739) Wm. McIntosh & Son	6-17-59	11-9-59	10,145.00	10,145.00	District
Polytechnic High School - (1724) Alt. to Basement Floor of Academic Building Stenmark Construction Co.	6-17-59	11-4-59	35,374.00	35,374.00	1956 School

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-60	Fund
A-2 MISCELLANEOUS ALTERATIONS (cont.)					
John A. O'Connell School (1765) Alt. to acetylene manifold Bureau of Building Repair	6-26-59	7-24-59	$ 323.00	$ 323.00	District
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Grant School (1758) Interior Alterations & water pipe Installation H. E. Rahlmann Co.	7-1-59	10-27-59	7,396.00	7,396.00	District
Horace Mann Jr. High (1767) Toilet Room alterations Wm. McIntosh & Son	7-8-59	9-21-59	5,148.00	5,148.00	District
Francisco Jr. High (1771) Misc. alterations Leon Carlen	7-8-59	10-8-59	1,900.00	1,900.00	District
A. Lincoln High School (1761) Equipment Installation Bureau of Building Repair	7-8-59		3,510.00	3,510.00	District
Francisco Jr. High (1771) Misc. Alterations Leon Carlen	7-17-59	10-9-59	1,900.00	1,900.00	District
Herbert Hoover Jr. High (1773) Chalkboard & Misc. Installation Bureau of Building Repair	7-31-59	6-24-60	1,851.00	1,851.00	District
Various Schools (1766) Chain Link Fencing Anchor Post Prod.Inc.	8-7-59	12-14-59	8,888.00	8,888.00	District

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
A-2 MISCELLANEOUS ALTERATIONS (cont.)					
Columbus Elem. School (1763) Concrete wall & chain link fencing A. Petersen & Sons	8-7-59	10-15-59	$ 3,390.00	$ 3,390.00	District
Galileo High School (1774) Chain Link Fence San Jose Steel Co. Inc.	8-7-59	10-16-59	4,332.00	4,332.00	District
Southeast High School (1744) Prelim. rough grading & retaining walls M & K Corporation	8-7-59	12-11-59	84,444.00	84,444.00	1956 School
Various Schools (1782) Chain Link Fences San Jose Steel Co.Inc.	8-21-59	11-2-59	3,442.00	3,442.00	District
Polytechnic High School (1784) Installation of Fire Ladders Patterson & Elvin Iron Wks.	8-21-59	10-26-59	255.00	255.00	District
Ulloa School Annex (1786R) Replacement of gutters & leaders Wm.P. Goss Sheet Metal Wks.	9-11-59	11-2-59	2,291.60	2,291.60	District
James Lick Jr. High (1789) Alterations to basement Locker Room H. E. Rahlmann Co.	9-11-59	11-16-59	1,184.00	1,184.00	District

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
A-2 MISCELLANEOUS ALTERATIONS (cont.)					
James Lick Jr. High (1791) Replacement of Urinals H. Goldman & Son	9-11-59	12-30-59	$ 490.00	$ 490.00	District
Various Schools (1793) Installation of Wire Glass & Steel Sash DeNarde & Ganske	9-30-59	4-8-60	5,945.00	5,945.00	District
Hancock School (1799) Exterior Alt. and Waterproofing Arthur W. Baum	10-16-59	1-6-60	8,080.00	8,080.00	District
Various Schools Store room alterations (1798) Antone Petersen & Sons	10-23-59	6-30-60	6,468.00	6,468.00	District
Board of Education (1800) Interior alt. to rooms 311 & 312 Stenmark Construction Co.	10-23-59	3-7-60	9,953.00	9,953.00	District
Polytechnic High School (1818) Misc. alterations to Shops and Trash Storage Room Myron A. Johnson	12-4-59	2-11-60	1,549.00	1,549.00	District
Mission High School (1809) Misc. alterations H. E. Rahlmann Co.	12-4-59	2-4-60	4,214.00	4,214.00	District
Francisco Jr. High (1815) Installation of New Door from girls' Locker Room Bureau of Building Repair	12-4-59	1-25-60	997.00	997.00	District

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
A-2 MISCELLANEOUS ALTERATIONS (cont.)					
Francisco Jr. High (1826) Alteration (elec.) to Kitchen Bureau of Building Repair	12-23-59	3-18-60	$ 586.00	$ 586.00	District
Jefferson School (1770) Demolition of Main Building Bayshore Wreckers, Inc.	12-30-59	3-18-60	27,775.00	27,775.00	District
Various Schools (1823) New Yard Benches & repairs to existing C. J. Collins Co.	12-30-59	5-24-60	13,288.00	13,288.00	District
Various Schools (1797) Store Room Alterations Stenmark Construction Co.	1-15-60	90%	14,577.00	13,119.30	District
McKinley School (1819) Relocation of Portable Classroom Buildings C. J. Collins Co.	1-15-60	90%	10,354.00	9,318.60	District
Sir Francis Drake School (1822) Relocation of Portable Classroom Buildings H. E. Rahlmann Co.	1-15-60	80%	13,230.00	10,584.00	District
Galileo High School (1803) Lecture Room Wm. McIntosh & Son	1-15-60	5-20-60	18,726.00	18,726.00	District
Laguna Honda School (1842) Repairs to Vent Shaft & Caps Apex Sheet Metal Works	1-29-60	4-20-60	398.00	398.00	District

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
A-2 MISCELLANEOUS ALTERATIONS					
Luther Burbank Jr. High (1841) Installation of New Paths Bragato Paving Co.	1-29-60	4-26-60	$ 1,298.00	$ 1,298.00	District
City College (1827) Relocation of Portable Classroom Buildings Stenmark Construction Co.	2-5-60	97%	9,087.00	8,814.39	District
Board of Education (1843) Administration Offices Int. Alterations to IBM Rm. Stenmark Construction Co.	2-10-60	65%	22,288.00	14,487.20	District
Horace Mann Jr. High (1844) Auditorium Balcony Stairs C. J. Collins Co.	2-26-60	6-17-60	3,589.00	3,589.00	District
Various Schools (1834) Storeroom & various alterations Stenmark Construction Co.	2-26-60	95%	7,680.00	7,296.00	District
Bayview Elementary School (1806) Ext. Alterations & Window Installation Stenmark Construction Co.	2-26-60	15%	44,676.00	6,701.40	District
A. Lincoln High School (1703R) Improvements to Athletic Field Engstrum & Nourse	3-9-60	34%	285,400.00	97,036.00	1956 School

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
A-2 MISCELLANEOUS ALTERATIONS					
Portola Jr. High School (1832) Int. Alterations to Rooms 240 & 241 Bureau of Building Repair	3-11-60	95%	$ 6,532.00	$ 6,205.40	District
Various Schools (1848) Installation of Sprinkler System A & B Engineering, Inc.	3-25-60	65%	16,475.00	10,708.75	District
Portola Jr. High (1854) Elec. Service & Feeder alter. Abbett Electric Corp.	3-25-60	60%	17,687.00	10,612.20	District
Emerson School (1855) Window Replacement Wm. McIntosh & Sons	4-8-60	30%	23,389.00	7,016.70	District
Various Schools (1861) Installation of Sprinkler System A & B Engineering, Inc.	4-8-60	75%	9,370.00	7,087.50	District
Mission High School (1867) Electric Service & Main Switchboard alterations Bureau of Building Repair	4-29-60	90%	5,285.00	4,756.50	1956 School
Pelton Jr. High (1882) Repairs to Chain Link Fence Anchor Post Products, Inc.	5-6-60	6-10-60	666.00	666.00	District

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
A-2 MISCELLANEOUS ALTERATIONS (cont.)					
Galileo High School (1824) Alterations to Science Labs H. E. Rahlmann Co.	5-6-60	18%	$ 77,977.00	$ 14,035.86	1956 School
Mission High School (1814) Alt. to Sewing Rooms & Food Labs. C. J. Collins Co.	5-20-60	10%	47,787.00	4,778.70	1956 School
Cabrillo School (1876) Int. Alterations Bureau of Building Repair	5-27-60	90%	3,948.00	3,553.20	1956 School
Galileo High School (1888) Elec. Service & Switchboard alterations Brayer Electric Co.	6-3-60	2%	7,946.00	158.92	1956 School
Daniel Webster School (1883) Fire Escape repairs Fair Mfg. Co. Inc.	6-3-60	10%	5,740.00	574.00	District
Frederic Burk School (1874) Relocation of portable Classrooms Stenmark Construction Co.	6-3-60	0	11,796.00	0	District
Horace Mann Jr. High (1873R) Window replacement Stenmark Construction Co.	6-3-60	0	23,219.00	0	District

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
A-2 MISCELLANEOUS ALTERATIONS					
Portola Jr. High (1831) Alterations to Shops C.J. Collins Co.	6-3-60	5%	$ 128,278.00	$ 6,413.90	1956 School
Balboa High School (1836) Alterations to 3rd Floor for Homemaking Rooms Arthur W. Baum	6-10-60	0	45,158.00	0	1956 School
Parkside School (1879) Elec. Service & Switchboard Bureau of Building Repair	6-10-60	65%	5,566.00	3,618.00	1956 School
Cabrillo School (1890) Installation of Sprinkler System Allan Auto Sprinkler Corp.	6-24-60	0	29,987.00	0	1956 School
Everett & J. Denman Schools (1892) Equip. Installation Wm. McIntosh & Son	6-24-60	0	7,472.00	0	District
Total Awarded & Expended During Fiscal Year			$1,114,857.00	$972,883.95	

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
A-3 ACOUSTICAL JOBS					
Sheridan School (1710) Acoustical Tile Ceiling Johns-Manville Sales Corp.	3-11-59	8-12-59	$ 8,234.00	$ 8,234.00	1948 School
Farragut School (1711) Acoustical Tile Ceiling Western Asbestos Co.	3-13-59	8-7-59	7,240.00	4,990.00	1948 School
Com. Stockton School (1712) Acoustical Tile Ceiling Western Asbestos Co.	3-20-59	91.8%	9,890.00	9,440.00	1948 School
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Various Schools Acoustical Tile Ceilings (1785) Western Asbestos Co.	9-11-59	2-8-60	997.00	997.00	District
Mission High School (1807) Installation of Acoustical Tile for Theater Room Brookman Co. Inc.	11-6-59	2-4-60	1,154.00	1,154.00	District
Redding School (1862) Installation of Acoustical Tile Western Asbestos Co.	4-22-60	30%	9,550.00	2,865.00	1956 School
H. Hoover Jr. High (1893) Instal.of Acoustical Tile Western Asbestos Co.	6-10-60	0	3,838.00	0	1956 School
Total Awarded & Expended During Fiscal Year			$15,539.00	$27,680.00	

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
A-4 ROOFING JOBS					
Main Shop Building 1750 McAllister Re-roofing (1775) Western Roofing Service	8-7-59	10-9-59	$ 1,776.00	$ 1,776.00	General
H. Mann Jr. High (1863) Re-roofing & Misc. work Regal Roofing Co.	4-22-60	80%	15,911.00	12,728.80	District
Total Awarded & Expended During Fiscal Year			$ 17,687.00	$ 14,504.80	

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
A-5 RESILIENT FLOORING					
Aptos and Paul Revere Schools (1729) McGahey & Olson	4-24-59	8-14-59	$7,513.00	$7,748.54	District
Various Schools (1845) Asphalt and Ceramic Tile Floors (1845) Wm. McIntosh & Son	2-5-60	4-1-60	1,576.00	1,576.00	District
Madison School (1858) Floor reconstruction Bureau of Building Repair	4-13-60	75%	2,067.00	1,549.50	District
Sunnyside and Lawton Schools (1877) New Resilient Flooring The Brookman Co. Inc.	5-20-60	7-1-60	552.00	552.00	District
Total Awarded & Expended During Fiscal Year			$4,195.00	$11,426.04	

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
A-6 INTERIOR AND/OR EXTERIOR PAINTING					
Sheridan School - Exterior Painting (1721) Phoenix Painting Co	4-3-59	7-31-59	$ 8,200.00	$ 4,658.00	District
Cleveland School (1719) Interior Painting New Method Ptg. & Dec.Co.	4-3-59	8-4-59	7,866.00	7,866.00	District
Pacific Heights School (1718) Interior Painting New Method Ptg. & Dec. Co.	4-10-59	8-21-59	19,920.00	15,438.00	District
Lincoln School (1720) Interior & Exterior Paint. Perfection Painting Co.	4-24-59	8-21-59	6,724.00	5,211.00	District
Various Schools (1732) Game line painting, Series 1 Riley's Striping Service	5-8-59	9-11-59	1,185.24	1,185.24	District
Garfield School (1734) Exterior painting Manor Painters	5-8-59	7-30-59	4,762.00	4,762.00	District
Sunshine Health & Orthopedic School (1733) Exterior Painting Veterans Painting Co.	5-8-59	10-6-59	12,445.00	8,711.00	District
J. Denman Jr. Hi (1738) Interior Painting Wm. Sorenson Painting Co.	5-20-59	8-21-59	37,500.00	30,750.00	District

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CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
A-6 INTERIOR AND/OR EXTERIOR PAINTING (cont.)					
Main Shop Bldg. 1750 McAllister St. Interior Painting (1781) D. Zelinsky & Sons	8-21-59	10-27-59	$ 3,458.00	$ 3,458.00	General
Pacific Heights School (1795) Ext. Painting & Misc.work Richard Wm. Sorensen	9-30-59	11-24-59	187.00	187.00	District
Ulloa School (1853) Ext. Painting Phoenix Painting Co.	3-11-60	35%	5,499.00	1,924.65	District
Phoebe A. Hearst School (1852) Ext. Painting Kurt R. Stern	3-11-60	80%	1,690.00	1,353.00	District
Cleveland School (1850) Ext. Painting Phoenix Paint. Co.	3-11-60	15%	7,655.00	1,148.25	District
Mission High School (1847) Ext. Painting & repairs Arntz Construction Co.	3-11-60	8%	79,800.00	6,384.00	District
Everett Jr. High (1776R) Int. Painting of Boys' & Girls' Locker Area J. Wm. Sorensen	3-25-60	0	5,688.00	0	District
H. Mann Jr. High (1860) Ext. Painting Veterans Painting Co.	4-8-60	84%	17,140.00	14,397.60	District

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
A-6 INTERIOR AND/OR EXTERIOR PAINTING (cont.)					
Edison School (1857) Ext. Painting Veterans Painting Co.	4-8-60	66%	$ 9,995.00	$ 6,596.70	District
Farragut School (1829) Ext. & Int. Painting R. P. Paoli Co.	4-8-60	15%	17,019.00	2,552.85	District
Galileo High School (1866) Int. Painting of Boys' Gym D. E. Burgess Co.	4-22-60	0	7,945.00	0	District
Daniel Webster School (1875) Ext. Painting Manor Painters	5-2-60	15%	4,989.00	748.35	District
Presidio Jr. High (1869) Ext. Painting Phoenix Painting Co.	5-6-60	12%	9,224.00	1,106.88	District
R. L. Stevenson School (1872) Ext. Painting A. C. Saraiva	5-6-60	30%	7,824.00	2,347.20	District
Com. Stockton School (1828) Int. & Ext. Painting R. P. Paoli Co.	5-20-60	0	12,364.00	0	District
Dudley Stone School (1887) Ext. Painting Veterans Painting Co.	6-3-60	15%	2,300.00	345.00	District

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
A-6 INTERIOR AND/OR EXTERIOR PAINTING (cont.)					
Balboa High School (1889) Int. Painting of Auditorium Lobby Robt. Thompson	6-3-60	0	$ 1,725.00	0	District
Total Awarded & Expended During Fiscal Year			$194,502.00	$121,130.72	

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
A-7 YARD PAVING					
Various Schools (1743) Resurfacing & Painting Game Lines Malott & Peterson-Grundy	5-29-59	9-16-59	$ 23,847.00	$ 23,847.00	District
Page, Broderick & Gough Child Care Centers (1759) Resurfacing Malott & Peterson-Grundy	6-17-59	10-15-59	1,847.00	1,847.00	District
Mission Child Care Center (1760) Yard Paving The Lowrie Paving Co.	6-17-59	8-5-59	1,841.00	1,841.00	District
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Various Schools (1742R) Resurfacing Yard Painting Game Lines, series I Malott & Peterson-Grundy	7-1-59	9-10-59	29,787.00	29,787.00	District
Various Schools (1764) Resurfacing Yard Area Painting Game Lines Malott & Peterson-Grundy	7-1-59	9-10-59	16,658.00	16,658.00	District
Sunshine Health & Orthopedic School (1794) Resurfacing Yard Area Malott & Peterson-Grundy	9-11-59	11-24-59	1,200.00	1,200.00	District

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
A-7 YARD PAVING (cont.)					
Various Schools (1865) Yard Paving Painting Game Lines Malott & Peterson-Grundy	4-22-60	38%	$ 19,487.00	$ 7,404.96	District
Various Schools (1870) Yard Paving & Painting Game Lines Series 2 Malott & Peterson-Grundy	6-3-60	5%	47,777.00	2,388.85	District
Douglas School (1899) Yard Paving Painting Game Lines Malott & Peterson-Grundy	6-24-60	0	31,717.00	0	District
Total Awarded & Expended During Fiscal Year			$146,626.00	$84,973.81	

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
B-1 FIRE DEPARTMENT NEW CONSTRUCTION					
Engine #15, Project 107 (1722) General Construction, plumbing mechanical & electrical work Clovis Construction Co.	4-29-59	81%	$321,500.00	$260,415.00	1952 Fire
Fire House #14, Project 19 (1783) General Construction, plumbing, mechanical & electrical work Ira H. Larsen Co.	9-18-59	39%	252,111.00	98,323.29	1952 Fire
Chain Link Fence (1779) Auxiliary Reservoir, Twin Peaks El Dorado Fence Co.	10-28-59	2-19-60	6,974.00	6,974.00	General
Total Awarded & Expended During Fiscal Year			$259,085.00	$365,712.29	

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
B-2 FIRE DEPARTMENT RECONSTRUCTION					
Auxiliary Reservoir - Twin Peaks (1779A) Landscaping Chain Link Fence Ladesco	3-2-60	4-15-60	$ 639.00	$ 639.00	General
Total Awarded and Expended During Fiscal Year			$ 639.00	$ 639.00	

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	AMount Expended 1959-1960	Fund
C-1 DEPARTMENT OF PUBLIC HEALTH SAN FRANCISCO GENERAL HOSPITAL					
General construction of Connecting Corridors btw Ward Bldgs. 30 & 40 (1591) Hart & Hynding, Inc.	7-2-58	2-17-60	$ 287,420.00	$ 115,968.00	1954 Hospital
New Passenger Elevator connecting Corridors btw Ward Bldgs. 30 & 40 (1592) Pacific Elevator Co.	7-2-58	12-4-59	35,531.00	35,531.00	1954 Hospital
General construction Ward Bldg. 40, Proj.3, Phase D, Part 2 (1590) McBroom & Cecchini	7-11-58	12-16-59	455,753.00	142,819.00	1954 Hospital
New Elevator and related work Isolation Bldg. 100 (1671) Wm. McIntosh & Son	11-14-58	12-18-59	78,589.00	42,648.00	General
Recreation Area for Psychiatric Patients (1691) O. C. Jones & Sons	1-9-59	7-17-59	8,366.35	1,935.35	1954 Hospital
Consolidation of Laboratories Bldgs. 100, 200, 300, & 4 (1696) Arntz Construction Co.	3-25-59	76%	558,563.00	42,763.55	1954 Hospital

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
C-1 DEPARTMENT OF PUBLIC HEALTH SAN FRANCISCO GENERAL HOSPITAL (cont.)					
General Construction of new P.G.& E. Service Bldg. (1735) Proj.11-Service Wing Stenmark Construction Co.	5-27-59	5-17-60	$ 31,935.00	$ 31,935.00	1954 Hospital
San Francisco Gen.Hospital (1749) Passenger Elevator, Connecting Corr. btw Ward Bldgs.10 & 20 Pacific Elev. & Equip. Co.	10-2-59	0	34,795.00	0	1954 Hospital
General Construction of Ward Bldg. 10 -Modernization (1748-1750) Proj. III, Phase E Part 1 and Conn. Corr. btw Bldgs 10 & 20 Arntz Bros.	10-2-59	30.5%	924,629.00	282,011.84	1954 Hospital
Total Awarded and Expended During Fiscal Year			$959,424.00	$695,611.74	

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
C-2 DEPARTMENT OF PUBLIC HEALTH LAGUNA HONDA HOME					
Ward Bldgs. E & F (1610) Int. Alterations, Proj. 8-A S. J. Amoroso Construction Co.	10-10-58	2-29-60	$ 440,750.00	$ 216,832.00	General
Ward Bldg. K (1665) Alterations & related work Amoroso Construction Co.	12-17-58	4-22-60	330,085.00	185,114.00	General
Alterations to two Passenger Elevators, Ward Building K (1651R) Pacific Elev. & Equip. Co.	1-30-59	4-18-60	56,894.00	56,894.00	General
Dining Rooms, Wards M1, M2, M3, M4 (1757) New Resilient Flooring Floorcraft	5-29-59	8-19-59	975.00	975.00	General
- -					
Alterations to Confectionery (1790) Stenmark Construction Co.	10-23-59	5-10-60	7,760.00	7,760.00	General
New Shelter for Incinerator Platform (1810) H. E. Rahlmann Co.	11-20-59	2-17-60	4,587.00	4,587.00	General
Replacement of Traction Ropes Elevator #2 (1833) Otis Elevator Co.	1-6-60	3-9-60	393.44	393.44	General

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
C-2 DEPARTMENT OF PUBLIC HEALTH LAGUNA HONDA HOME (cont.)					
Alterations to Ward Bldg. L and related work (1825) Arntz Construction Co.	4-22-60	2%	$ 355,653.00	$ 7,113.00	General
Reroofing & Weather Proofing work - Garage (1817) Regal Roofing Co.	6-1-60	7-1-60	1,189.00	1,189.00	General
Terrazzo Floor Repair (1907) Travertite Co. Inc.	6-17-60	0	1,995.00	0	General
Alterations to Ambulatory Women's Dispensary (1891) H. E. Rahlmann Co.	6-17-60	0	2,973.00	0	General
Miscellaneous Repairs to Passenger Elevators (1802) Pacific Elev. & Equip. Co.	6-17-60	0	24,700.00	0	General
Total Awarded & Expended During Fiscal Year			$ 399,250.00	$480,857.44	

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
C-3 HEALTH CENTER BUILDING					
Handrails & Stair treatment (1787-R) Arthur W. Baum	10-30-59	3-22-60	$ 1,689.00	$ 1,689.00	General
Total Awarded & Expended During Fiscal Year			$ 1,689.00	$ 1,689.00	

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
D- M. H. DE YOUNG MEMORIAL MUSEUM					
New Skylighting & Reroofing East Wing (1728) De Narde & Ganske	5-8-59	12-4-59	$ 86,941.00	$ 75,986.00	General
- - - - - - - - - - - - - - - -	- - -	- - - - - -	- - - - - -		
Rigging & Hoisting work for examination of Historical Masonry (1769) G. W. Thomas Dray.& Rig.Co.	7-3-59	10-7-59	1,310.00	1,310.00	General
Additional Skylight Ceilings East Wing (1788) De Narde & Ganske	9-11-59	2-8-60	19,200.00	19,200.00	General
Reroofing & Related work Phase 1 (1801) Regal Roofing Co.	10-28-59	2-23-60	13,911.00	13,911.00	General
Skylight Replacement & Reglazing Roof repairs Phase II (1821) O'Keefe Electric Co.	1-8-60	5-3-60	8,957.00	8,957.00	General
Rubble Removal, Rigging & Hoisting work (1885) Historical Monastery Flora Crane Service	5-27-60	0	9,460.00	0	General
Total Awarded & Expended During Fiscal Year			$ 52,838.00	$119,364.00	

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
E- YOUTH GUIDANCE CENTER					
Alterations to Boys Cottage B-1 (1740) Stenmark Construction Co.	5-20-59	10-23-59	$ 3,627.00	$ 3,627.00	General
Log Cabin Ranch School for Boys Add. hose carts, etc. (1754) Bureau of Building Repair	6-17-59	3-25-60	6,595.00	6,595.00	General
Total Awarded & Expended During Fiscal Year			0	$ 10,222.00	

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
F- CIVIC CENTER					
Alterations to Controller's Office, Payroll Div. (1745) Ground Floor, City Hall	5-27-59	8-4-59	$ 4,388.00	$ 4,388.00	General
Painting Ornamental Iron Fences War Memorial Court of Honor (1752) Bureau of Building Repair	5-27-59	10-2-59	4,300.00	4,300.00	General
Fabric Wall Covering - San Francisco Museum of Art - Veterans Memorial Bldg. (1756) Ink Ribbon Mfg. Corp.	6-12-59	12-1-60	978.00	978.00	General
Alterations to City Attorney's office- Third Floor City Hall (1762) Antone Peterson & Sons	6-26-59	10-30-59	11,761.00	11,761.00	General
- -					
Alterations to Court Room, City Hall, Fourth Floor (1772) Stenmark Construction Co.	7-29-59	11-24-59	7,773.00	7,773.00	General
General Construction - Civic Center Plaza, Phase I (1805) Haas & Haynie Corp.	10-1-59	6-30-60	63,300.00	63,300.00	1954 Ex.Hall
Brooks Hall - Protective Railings (1811) Bureau of Building Repair	12-4-59	6-17-60	1,452.00	1,452.00	General

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
F- CIVIC CENTER					
City Hall - Second Floor (1820) Alterations to Supervisors' & Clerks' Offices Antone Peterson & Sons	12-29-59	92%	$ 42,910.00	$ 39,477.20	General
Civic Center Plaza - Phase 2 (1849R) Watkin & Sibbald	5-13-60	18%	633,387.00	114,009.56	1954 Ex.Hall & Spec.Road Impr.
Total Awarded & Expended During Fiscal Year			$748,822.00	$247,438.76	

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
G- HALL OF JUSTICE					
General Construction, Plumbing, Mechan. & Elec. work Phase II (1620) M & K Corporation	11-19-58	47.5%	$13,508,500.00	$6,533,602.50	1956 H of J
New Hall of Justice Elevators (1620R) Otis Elevator Co.	11-19-58	25%	465,888.00	116,472.00	1956 H of J
New Hall of Justice Topsoil, Finish Grading & Planting (1620B) Rudolph Watson	11-19-58	0	30,500.00	0	1956 H of J
Total Awarded & Expended During Fiscal Year			0	$6,650,074.50	

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
H- MISCELLANEOUS					
California Palace of Legion of Honor - Esplanade Repairs (1702) Arthur W. Baum	3-4-59	12-15-59	$ 29,300.00	$ 17,693.00	General
Public Welfare Dept. (1780) Reroofing & office alt. H. E. Rahlmann Co.	9-2-59	11-25-60	5,843.00	5,843.00	General
Palace of Legion of Honor New supports & shims (1804) Fair Mfg. Co., Inc.	10-2-59	11-12-59	270.00	270.00	General
Richmond-Sunset Sewage Treat. Plant (1796) Replacement of windows & skylights Stenmark Construction Co.	10-16-59	5-6-60	6,306.00	6,306.00	General
Hassler Health Home (1778) Misc. Fireproofing work Stevenson-Pacific, Inc.	11-25-59	2-2-60	7,496.00	7,496.00	General
Legion of Honor Tea Room, Toilet & stage Dress. Rm. Ventilation (1792R) Antone Peterson & Sons	1-6-60	6-7-60	8,569.00	8,569.00	General

CURRENT CONTRACT DATA 1959-1960

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1959-1960	Fund
H- MISCELLANEOUS (cont.)					
War Memorial Opera House (1723) Stage Flooring C. J. Collins	1-20-60	0	$ 9,485.00	0	General
War Memorial Opera House (1868) Steam cleaning W. L. Bipes Co.	5-4-60	10%	46,857.81	$ 4,685.78	General
Main Library (1886) Steam cleaning & pointing Arthur W. Baum	6-3-60	0	20,100.00	0	General
S. F. Museum of Art (1900) Fabric wall covering Ink Ribbon Mfg. Co.	6-15-60	0	1,394.00	0	General
Voting Machine Warehouse office enclosure (1878) C. J. Collins Co.	6-24-60	0	19,384.00	0	General
Total Awarded & Expended During Fiscal Year			$125,704.81	$ 50,862.78	

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ANNUAL REPORT

of the

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF SAN FRANCISCO

FISCAL YEAR ENDING JUNE 30, 1961

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ANNUAL REPORT

of the

DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF SAN FRANCISCO

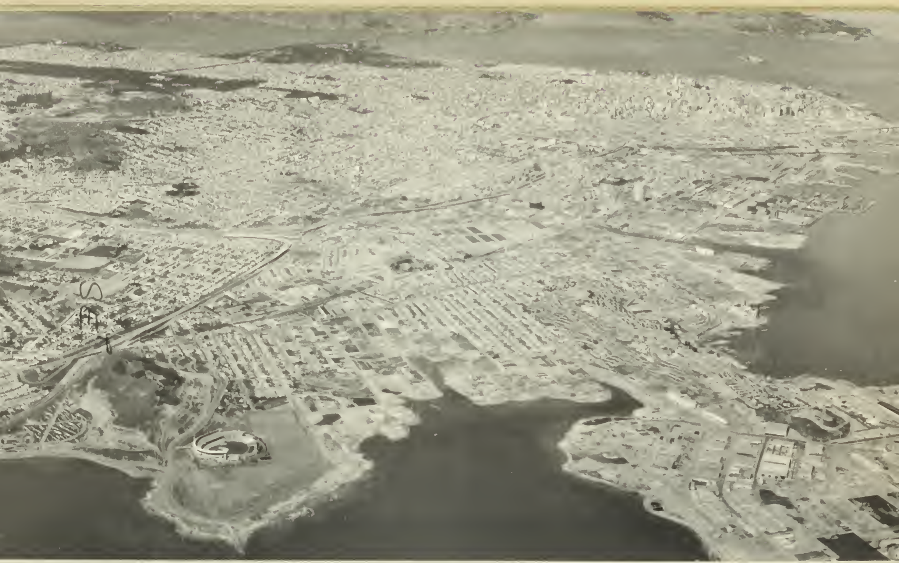
FISCAL YEAR ENDING JUNE 30, 1961

GEORGE CHRISTOPHER________________________Mayor

SHERMAN P. DUCKEL______Chief Administrative Officer

REUBEN H. OWENS____________Director of Public Works

Material compiled by John A. Jelincich, Bureau of Engineering



San Francisco by air. Candlestick Park, left foreground; Hunters Point Naval Shipyard, right foreground.

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Table of Contents

DIRECTOR'S LETTER OF TRANSMITTAL 5

BUREAU OF ENGINEERING 7

- General Review 7
- Administration of Contracts 7
- Division of Streets and Highways 9
- Division of Recreation and Park Engineering 28
- Division of Design 45
- Division of Traffic Engineering 71
- Division of Surveys and Mapping 82
- Division of Construction 87
- Administration of Bureau 89

BUREAU OF ARCHITECTURE 93

BUREAU OF BUILDING INSPECTION 116

MAINTENANCE AND OPERATION 131

- BUREAU OF STREET REPAIR 133
- BUREAU OF SEWER REPAIR AND SEWAGE TREATMENT. 148
- BUREAU OF BUILDING REPAIR 165
- BUREAU OF STREET CLEANING 176

ADMINISTRATIVE BUREAUS 186

- BUREAU OF ACCOUNTS 186
- CENTRAL PERMIT BUREAU 192

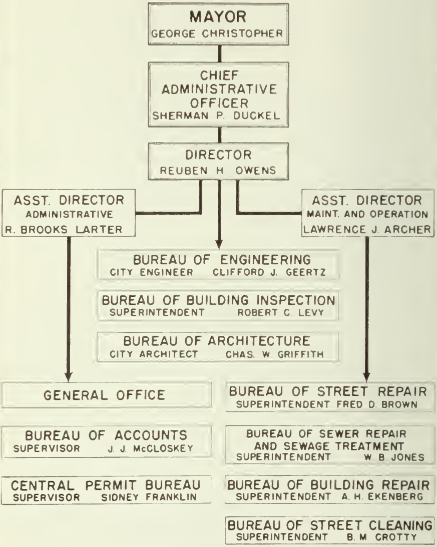
APPENDICES

I - Current Contract Data, Bureau of Engineering
II - Current Contract Data, Bureau of Architecture

ORGANIZATION CHART

DEPARTMENT OF PUBLIC WORKS

CITY AND COUNTY OF SAN FRANCISCO
JUNE 30, 1961


MAYOR
GEORGE CHRISTOPHER
CHIEF ADMINISTRATIVE OFFICER
SHERMAN P. DUCKEL
DIRECTOR
REUBEN H OWENS
ASST. DIRECTOR
ADMINISTRATIVE
R. BROOKS LARTER
ASST. DIRECTOR
MAINT. AND OPERATION
LAWRENCE J. ARCHER
BUREAU OF ENGINEERING
CITY ENGINEER CLIFFORD J. GEERTZ
BUREAU OF BUILDING INSPECTION
SUPERINTENDENT ROBERT C. LEVY
BUREAU OF ARCHITECTURE
CITY ARCHITECT CHAS. W GRIFFITH
GENERAL OFFICE
BUREAU OF ACCOUNTS
SUPERVISOR J. J. McCLOSKEY
CENTRAL PERMIT BUREAU
SUPERVISOR SIDNEY FRANKLIN
BUREAU OF STREET REPAIR
SUPERINTENDENT FRED D. BROWN
BUREAU OF SEWER REPAIR AND SEWAGE TREATMENT
SUPERINTENDENT W B JONES
BUREAU OF BUILDING REPAIR
SUPERINTENDENT A. H. EKENBERG
BUREAU OF STREET CLEANING
SUPERINTENDENT B. M CROTTY

CITY AND COUNTY OF SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS

OFFICE OF THE
DIRECTOR OF PUBLIC WORKS

260 CITY HALL
SAN FRANCISCO 2
CALIFORNIA

January 31, 1962

Annual Report
1960 - 1961

Mr. Sherman P. Duckel
Chief Administrative Officer
City and County of San Francisco

Dear Mr. Duckel:

In compliance with the provisions of Section 20 of the Charter of the City and County of San Francisco, I submit the annual report of the Department of Public Works for the fiscal year ending on June 30, 1961.

During the fiscal year the Department awarded 232 construction contracts for the total bid amount of $15,559,600, a decrease of 2½% in the number of contracts but an increase of 4% in the value of contracts awarded in the preceding year.

Major projects under construction were the Geary Expressway between Franklin Street and Masonic Avenue, including an underpass beneath Fillmore Street, the new Hall of Justice, the new Lowell High School and the new Southeast High School.

The engineering functions of the Recreation and Park Department were transferred to this department in February of 1961 by a Charter amendment passed at the November 1960 election. The employees were assigned to positions in our Bureaus of Engineering and Accounts.

There were 12,865 building permits issued for private construction projects estimated to cost $120,286,790. This was an increase of 14% in the number of permits but a decrease of 0.3% in the estimated value of construction. This is but $344,000 less than the high of over $120 million established in 1960.

I take this opportunity to thank the Assistant Directors, the Bureau Heads, their staffs, and the personnel of the Department for jobs well done.

In conclusion, may I say that your guidance and assistance throughout the year was deeply appreciated.

Very truly yours,

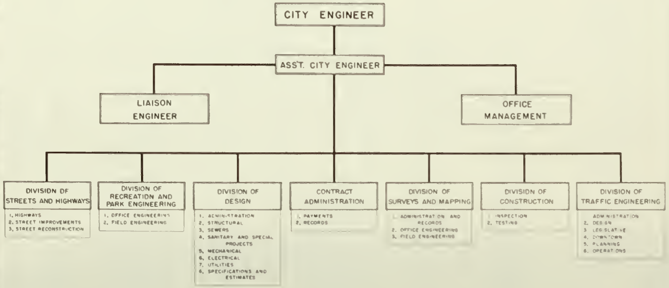
Reuben H. Owens

Reuben H. Owens
Director of Public Works

ORGANIZATION CHART

BUREAU OF ENGINEERING

DEPARTMENT OF PUBLIC WORKS
JUNE 30, 1961



BUREAU OF ENGINEERING

Clifford J. Geertz, City Engineer

GENERAL REVIEW OF THE YEAR'S WORK

The organization of the Bureau changed somewhat during the year and is depicted on the chart shown on the opposite page. By a Charter amendment adopted in November 1960, the engineering functions of the Recreation and Park Department were transferred to the Department of Public Works. Pursuant to this amendment, the engineering personnel of the Recreation and Park Department were assigned to the Bureau of Engineering and incorporated in its organization as a separate Division. Other changes include the assignment of an engineer to head the Division of Streets and Highways, formerly a collateral duty of the Assistant City Engineer, and the addition of a Liaison Section, to assist in certain staff functions designated by the City Engineer and the Assistant City Engineer.

In general, the work of the Bureau continued at the same general level as during the preceding year.

The total value of contracts awarded was approximately $2.8 million less than last year's amount, although the number of contracts increased from 113 to 120. Contract payments made during the year, however, amounted to about $5,760,000, an increase of more than $900,000 over last year.

ADMINISTRATION OF CONTRACTS

Table I summarizes the contracts which were awarded or in progress during the fiscal year under plans and specifications prepared by the Bureau. This summary is supplemented by separate tables in Appendix I which list all the contracts for each of the various types of construction. Table I also indicates the estimated amount expended during the year on contracts under way, some of which had been awarded during the preceding year but not completed until the current year.

The figures for contracts awarded and amounts expended are shown graphically in Figure 1 for a ten year period.

TABLE I
BUREAU OF ENGINEERING CURRENT CONTRACT DATA SUMMARY SHOWING CONTRACT WORK AWARDED OR IN PROGRESS
July 1, 1960—June 30, 1961

Table	Type of Construction	No.	CONTRACTS AWARDED AGGREGATE VALUE	AMOUNT EXPENDED FISCAL YEAR 1960-61
A	Major Thoroughfares	1	$ 882,433.50	$ 878,670.00
B-1	Streets - Private Contracts	40	407,362.00	1,579,053.00
B-2	Streets - Assessment Proceedings	17	220,777.26	377,151.02
B-3	Streets - Public Contract City Pay	14	450,611.80	425,203.27
B-4	Streets - Car Track Removal	1	305,492.92	305,492.92
C	Traffic Signals and Channelization	3	61,956.83	68,806.21
D-1	Sewers - Pipe, Vitrified Clay and Concrete	9	465,367.54	729,625.37
D-2	Sewers - Concrete, Monolithic	2	357,784.00	837,858.02
E	Miscellaneous	33	875,235.55	562,535.33
	TOTALS	120	$4,027,021.40	$5,764,395.14

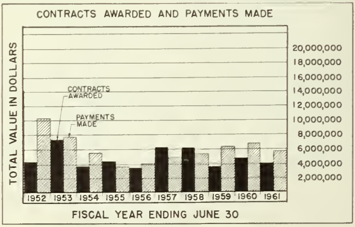


FIG. 1
CONTRACTS AWARDED AND PAYMENTS MADE

DIVISION OF STREETS AND HIGHWAYS

ROAD AND STREET DEFICIENCIES

The fourth Annual Report on Road and Street Deficiencies in the City and County of San Francisco listed 27.69 miles of deficiencies as of June 1, 1961, an increase of 3.01 miles, or 12.2%, from the report of June 1, 1960. The increase was due to the inventory of additional deficiencies in secondary arterials and other City streets although deficiencies in the primary arterials have been substantially eliminated by the construction of Geary Expressway and Brotherhood Way.

It was estimated in the report that $24,980,000 would be required to correct all the listed deficiencies.

AERIAL SURVEYS

The application of photogrammetric methods for mapping has supplied important and unique information for two project areas having dissimilar topographic and planimetric features - routing of Great Highway extension is through a virtually uninhabited region while the widening of Geneva Avenue involves an intensely developed residential area.

The location and design of the roadways were measuarbly facilitated by this modern and valuable method of mapping.

HIGHWAY SECTION

Functions

Planning and designing freeways, major streets and highway improvements; developing technical specifications for pavements; preparing preliminary drawings, displays, exhibits and reports for public hearings in connection with future freeway and highway developments; and maintaining close liaison with the State Division of Highways relative to planning and design of State Highways within the City and County.

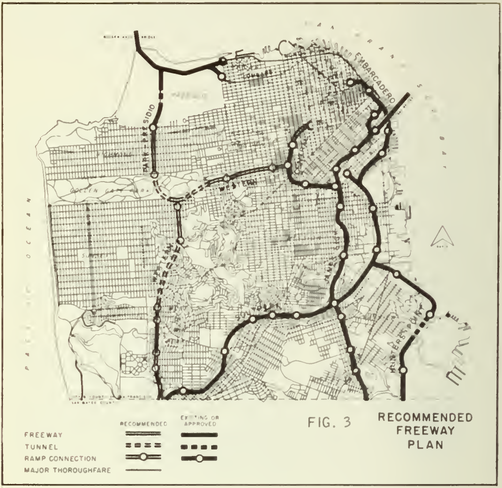


FIG. 3 RECOMMENDED FREEWAY PLAN

(4) The Russian Hill Tunnel: A tunnel (0.6 miles) from North Point Street and Columbus Avenue to Lombard and Franklin Streets to cost $32,000,000, to relieve traffic congestion through the North Beach and Marina districts, with expressway-type improvement on Lombard and North Point Streets. If in later years a freeway were found necessary, it could be integrated with the tunnel.

State Freeways

By adding Section 553.1 to the Streets and Highways Code, the State Legislature included Route 253 into the State Highway System. The new section became effective in September 1959 and states:

"553.1 Route 253 is from:

"(a) Route 68 near the South City limits of San Francisco to Route 224 near the San Francisco-Oakland Bay Bridge.

"(b) Route 68 near Alemany Boulevard to the route described in subdivision (a) of this section.

"(c) Construction of either portion of Route 253 described in subdivisions (a) and (b) may be commenced when the City and County of San Francisco has acquired all rights of way necessary for the construction of such portion and has conveyed these rights of way to the State of California for highway purposes."

The Real Estate Department has been proceeding with acquisition of rights of way for the route described in Subdivision (b) and is to convey to the State in the early part of 1962 the necessary rights of way so that construction may commence on the first unit of the freeway between the Route 2/68 Interchange and Newcomb Avenue.

There is the expectation, however, that the foregoing statute may be amended to absolve the City and County of San Francisco from the obligation for acquiring the rights of way.

Southern Freeway (Route 2)

A $7,565,000 project was completed in July 1960 for the interchange structure at James Lick Memorial Freeway, the first of four units of construction for the proposed Southern Freeway whose 4.2-mile route extends southwesterly from the James Lick Memorial Freeway at the Alemany Rotary (Route 2/68 Interchange) to connect with Route 225 at Orizaba Avenue.

The second unit, between the Route 2/68 Interchange and Milton Street, will be constructed under a $4,273,000 contract awarded September 1, 1960. This route will cover 1.1 miles and will have an initial six lanes.

Final plans have been established for the next unit which will also have an initial six lanes. A $6,000,000 project, this unit is to extend from Mission Street to 0.3 miles north of Ocean Avenue.

The last unit is to complete the 4.2-mile routing to Orizaba Avenue. Estimated to cost $4,600,000 its design is in the final stages of completion and is to be ready for review by the City in the fall of 1961.

Southern-Embarcadero Freeway (Route 253)

On June 12, 1961, the Board of Supervisors adopted Resolution No. 361-61 requesting that the California Highway Commission hold a public hearing prior to route adoption for that portionof State Highway Route 253 between Evans Avenue and the junction of the existing Embarcadero Freeway at Howard Street. Earlier, in April, the Board by Resolution No. 236-61, had indicated is approval of proposed alternate Route "P-P11" located generally on the east slope of Potrero Hill to divide the industrial area to its east from the residential area to its west.

The freeway route between Evans Avenue and the Route 2/68 Interchange had been adopted in 1960 and its design will be essentially that prepared by the consulting firm of DeLeuw, Cather and Company when the freeway route was under City jurisdiction.

Embarcadero Freeway (Route 224)

Design studies are under way for access ramps to Washington and Clay Streets to handle the traffic expected to be generated by the planned improvements in the Golden Gateway Redevelopment Area. Construction of the ramps is to be closely correlated with the widening of Washington and Clay Streets by the City.

Hunters Point Freeway (Route 253)

Planning studies are continuing for this proposed freeway between Evans Avenue and the junction with Bayshore Freeway south of the county line. This traffic facility will relieve congestion on the James Lick Memorial Freeway and will serve planned and existing developments in the southeastern sector of the City.

Southern Freeway (Route 225)

Inter-county traffic will be handled by this link in the State Highway System connecting the proposed Southern Freeway at Orizaba Avenue with the proposed Junipero Serra Freeway in San Mateo County. Design studies are in progress for this 5.25-mile project.

Street and Highway Improvements

Major Thoroughfares

Geary Expressway

The second contract for converting 1.3 miles of Geary Boulevard into a 6-lane expressway between Franklin Street and Masonic Avenue was awarded on March 17, 1960. This $882,433 contract included the construction of a 164-foot 3-span prestressed concrete pedestrian overcrossing at Steiner Street having an 85-foot center span over the main roadway. Completion is scheduled for October 1961, the same as for the first contract.

GEARY EXPRESSWAY UNDERPASS AT FILLMORE STREET
Looking East from Steiner Street

Construction of a vehicular underpass at Fillmore Street is well under way under the first contract awarded December 2, 1959, at $981,889. Fillmore Street traffic is to be carried over the expressway on a prestressed concrete grade separation structure.

Brotherhood Way

Work is essentially completed on the $167,307 project for the realignment and reconstruction of Brotherhood Way between Lake Merced Boulevard and a point west of Junipero Serra Boulevard. A prestressed concrete pedestrian overcrossing at Thomas More Way is completed and in operation. The contract for this 6-lane divided roadway was awarded June 24, 1960.

PEDESTRIAN OVERCROSSING AT BROTHERHOOD WAY AND THOMAS MORE WAY

Secondary Thoroughfares

Mansell Street Widening

Mansell Street extends from San Bruno Avenue to University Street at the boundary of John McLaren Park. Formerly unimproved, Mansell Street is now a 4-lane divided roadway as a result of a $316,994 contract awarded October 9, 1959. The wide median strip will be landscaped for this 0.6-mile roadway, which is a part of the proposed McLaren Parkway.

MANSELL STREET WIDENING
Before Construction

MANSELL STREET WIDENING
After Construction

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Other Projects

Drumm Street Park

For enhancing the appearance of lower Market Street, a contract was awarded on October 26, 1960, for reconstructing and landscaping the traffic island at the intersection of Market, California, and Drumm Streets. Plans were prepared by Osmundson and Staley, Consulting Landscape Architects.

Work was completed in June 1961. Although the traffic island is small in area, it has distinguishing features of a plaza, such as trees, plants, benches, and a drinking fountain.

This is a cooperative beautification project between the City and the San Francisco Downtown Market Street Improvement Association which participated in financing a portion of the project.

DRUM STREET PARK
Before Construction

DRUM STREET PARK
After Construction

Photo courtesy Allen's Photo Service

New Hall of Justice General Parking Lot

An $82,490 project for providing a landscaped parking area for the new Hall of Justice at Seventh and Bryant Streets is scheduled to be finished in August 1961. The entrance and exit are to be located on Harrison and Harriet Streets, respectively. The contract to provide 276 stalls (self parking) was awarded January 13, 1961.

Plans for Future Work

Webster Street Widening

The widening of Webster Street between Post Street and Golden Gate Avenue is to be rescheduled for advertising in the fall of 1961. The $330,000 project will provide a 4-lane divided roadway, a north-south route through the heart of the Western Addition Redevelopment Area A-1 project.

McLaren Park Roads

Comprised of two units of roadway, the McLaren Park Roads project is to be advertised in the spring of 1963. Plans for the project are nearing completion.

The first unit, as a section of the proposed McLaren Parkway, will extend from Mansell Street at University Street to Persia Avenue and Brazil Avenue at La Grande Avenue and will be four lanes, divided. The second unit will be a 2-lane roadway and will be on the south slope of McLaren Park between Visitacion Avenue at Hahn Street and a junction with the first unit west of University Street.

Planning for the project was conducted in coordination with the McLaren Park development plan by the Recreation and Park Department.

Geneva Avenue Widening

Geneva Avenue west of Alemany Boulevard is to be widened to accommodate a 4-lane divided roadway. An essential part of this project is the extension of Geneva Avenue westerly to Ocean Avenue at Phelan Avenue to afford a through route for traffic generated in part from the ramp system of the proposed Southern Freeway.

Preparation of plans is well under way for the first contract for widening between Alemany Boulevard and San Jose Avenue. The Real Estate Department is proceeding with acquisition of the required rights of way.

Great Highway Extension

Preliminary plans are completed for the extension of the Great Highway from Sloat Boulevard southerly to a point on Skyline Boulevard to be abandoned as part of the expansion plan for the San Francisco Zoological Gardens.

The new roadway will have four lanes and a wide landscaped median strip.

Washington Street Widening

Clay Street Widening

Drumm Street Widening

Redevelopment Area E-1 Street Work

These four projects are essential in the redevelopment plan for transforming the present wholesale produce market area into a modern community called the Golden Gateway. Completion of these projects will provide the necessary traffic facilities in complement to the redevelopment program now in progress.

The widening of Washington and Clay Streets is to be between Sansome and Davis Streets. These will be 3-lane roadways with Clay Street one-way eastbound leading traffic to the proposed "on" ramp of the Embarcadero Freeway and with Washington Street one-way westbound taking traffrom the proposed "off" ramp.

The widening of Drumm Street will be between California and Jackson Streets. Included with this project is the widening of a very short section of Washington Street between Drumm Street and The Embarcadero, providing a 4-lane divided roadway as a through route along the eastern perimeter of the Golden Gateway area.

The fourth project will undertake the reconstructing and resurfacing of various other streets within the redevelopment area.

STREET IMPROVEMENT SECTION

Functions

Preparing plans, specifications, and line and grade diagrams for street improvements under private contract and under special assessment proceedings; maintaining records of original paving projects; inspecting pavement and sidewalks to discover failures or misuse; reviewing applications for permits for special street use; making investigations and inspections in connection with encroachment, street use, and excavation permits; enforcing the repair of defective sidewalks; investigating claims of any type made against the department; and inspecting debris dump operations for regulatory purposes.

Providing coordination of special assessment procedures, preparing special assessment documents, spreading assessments, and generally supervising assessment proceedings.

Street Improvements Financed by Property Owners

All street construction projects financed in whole or in part by the owners of fronting property and for which permits were granted or public contracts awarded during the 1960-61 fiscal year, together with those authorized but not completed in the previous fiscal year, are listed in detail in Appendix 1, Tables B-1 and B-2.

Private Contracts

Table B-1 lists the street improvements constructed under private contracts that were negotiated directly between the property owners and contractors of their own choice. The City's only function in private contract work is to grant the permit, furnish the plans and specifications, and inspect the work during construction. Of the fifty-four permits issued to June 30, 1961, for private contracts, forty-seven were active during the fiscal year resulting in $1,579,053 of work done.

Assessment Contracts

Table B-2 lists similar street projects done under public contracts awarded by the City, the cost being assessed in whole or in part against the property owners benefited by the work. This procedure is in accordance with the Street Improvement Ordinance of 1934 which provides for preparation of plans and specifications, notification of property owners, public hearings, award of contracts, supervision of construction, and final levy of assessments on the properties. In many cases, City Aid is extended in order to reduce individual assessments to the legal limits which is defined as two and one-half times the lot valuation. The City also contributes funds according to established rules in order to prevent excessive assessments on residential corners, irregular lots and property having disproportionately-long frontage.

Table II indicates the volume of work carried on during the year in connection with assessment proceedings for street improvements.

TABLE II
STREET IMPROVEMENT ASSESSMENTS
ASSESSMENTS AND BONDS FOR STREET WORK PERFORMED UNDER ARTICLE 6 CHAPTER X, PART II, OF THE PUBLIC WORKS CODE

Assessments issued for cost of street improvements	16
Cost of improvements covered by assessments issued	$787,038.87
Receipts for bond payments issued	130
Amount of bond payments collected	$ 19,358.23

STREET WORK PROCEEDINGS INSTITUTED UNDER THE STREET IMPROVEMENT ORDINANCE OF 1934

Resolutions of Intention passed	24
Street Improvement Projects recommended to the Board of Supervisors	23
Notices of Street Improvement posted	174
Notices of Resolution of Intention mailed	302
Ordinances ordering performance of street improvements passed	19
Proposals for street improvements published	24
Awards of Contract for street improvements	17
Notices for Recordation posted	196
Notices of Recordation mailed	344
Private Contracts granted	41
Estimated Cost of Private Contracts granted	$407,862

Street and Sidewalk Inspection

Under the direction of an Assistant Engineer, two Junior Engineers and six Inspectors of Public Works Construction were employed to inspect the use and condition of streets and sidewalks, supervise street excavations, investigate and report on claims for liability on the part of the City and County, inspect blasting and dump operations, and post notices of improvement and of assessment.

Sidewalk inspections were made throughout the City. Property owners with sidewalks found to be in need of repair, inconvenient or defective were requested to repair or reconstruct them. City forces repaired or reconstructed approximately 500 square feet of sidewalk fronting private property. Financing of the work was provided through the Delinquent Sidewalk Repair Revolving Fund.

The Department of Public Works may repair sidewalks in cases where the owner, upon notification, fails or neglects to make repairs. The cost of the work is an obligation of the property owner, and if the City is not reimbursed for the work within the allotted time a lien is placed on the property.

Sidewalk inspections were also conducted in conjunction with various pavement reconstruction, street resurfacing, and track removal projects to remind property owners of their obligation and responsibility for improving, repairing and maintaining the sidewalks fronting their properties. Cooperation of the property owners, combined with roadway and sidewalk pavement work, provides a completely renovated street.

Approximately 1,650 square feet of unimproved sidewalk area on Innes on Innes Avenue was constructed under a street improvement contract where the property owners, under proper notice, failed to construct sidewalk. The property owners were assessed for the work.

Blasting operations were inspected at the Jamestown Quarry, the Southern Freeway, the Diamond Heights Redevelopment, and other projects, as well as for obtaining material for the sanitary fill.

City streets used for house moving operations were inspected, and regulations pertaining to the moving, including traffic controls and use of the streets, were enforced.

Utility company excavation permits were processed and approved. Their excavating, backfilling, and repaving operations were inspected and supervised. Building plans for private improvements were reviewed for driveways, encroachments and the use of sub-sidewalk space.

Other services included regulation of the temporary occupancy of street space for construction, debris boxes, and street flower markets; investigations of complaints; and preparation of Department of Public Works Orders for permitting the installation of decorations such as flags, banners and posters for events of public interest.

The following summary illustrates the activities, functions and services rendered by the personnel of this section:

INSPECTIONS, NOTICES, PERMITS, AND INVESTIGATIONS

Curb lowering permits and inspections	1,364
Ownership addresses researched	1,781
Preliminary sidewalk repair notices served	20,798
Formal Notices to construct or repair sidewalks	313
Notices to remove obstructions, oil, etc.	1,337
Notices to replace side sewer covers	1,296
Street Space permits and inspections	3,700
Sidewalk tank excavation permits and inspections	447
House moving permits and inspections	65
Defects in pavements reported (written)	2,235
Damaged signs reported	328
Excavation permits approved	33,546
Excavation repaving inspected	2,780
Posting Notices of Improvements	37
State Encroachment Permits obtained	3
Claims investigations and inspections	454
Special investigations and permits (blasting, etc.)	5,991
Correspondence answered	474
Complaints and Inquiries (Personal or Telephone)	15,000
Building permit driveway plans, checked	2,153
Notices of Street Construction	150

Dump Inspections	88
Number of Sidewalk Frontages inspected	29,750

Damage Claims

During the fiscal year, at the request of the City Attorney's Office, investigations and reports were made covering 212 damage claims filed against the City and County of San Francisco involving the Department of Public Works.

The majority of the claims investigated were for damages alleged to have occurred as a result of Contractors' operations, utility company operations, sidewalk conditions, roadway conditions, and automobile collisions.

Control of Dumps

A City Ordinance became effective on April 14, 1961, for the regulatory control of dumps to be operated for the disposal of combustible waste materials derived from the construction, alteration, or demolition of buildings. Complaints concerning fires, air pollution and the unsightliness of dump operations made regulation necessary.

Affecting all future dump operations the Ordinance requires: a permit to operate; disposal by fill and cover method; facilities for fire prevention, dust prevention, and control of rodents and insects; and a fence and a barrier to control floating debris.

Operating under a provision of the Ordinance, the Department of City Planning approves dump sites while the Bureau of Engineering, together with the Department of Public Health and the Fire Department's Bureau of Fire Prevention and Public Safety, approves permit applications and enforces the regulations.

Of the seven dumps whose operators have been granted permits, two are open to the public while the others are for the use of wrecking and debris box companies. The City does not operate a public dump

STREET RECONSTRUCTION SECTION

Functions

Preparing plans and specifications for track removal, pavement reconstruction and street resurfacing projects; preparing plans for street maintenance and sidewalk improvement projects; and maintaining a legal list of accepted city streets.

Street Reconstruction and Maintenance

Ten contracts, aggregating $436,044 were awarded for reconstruction and maintenance on 14.72 miles of city streets. Eight of these contracts, totaling $198,634, were for reconstruction. The other two contracts, totaling $237,410, were for resurfacing.

The construction of slurry seal coat as reported in last year's annual report was found to be unsatisfactory and, therefore, no further contracts for this type of resurfacing are contemplated.

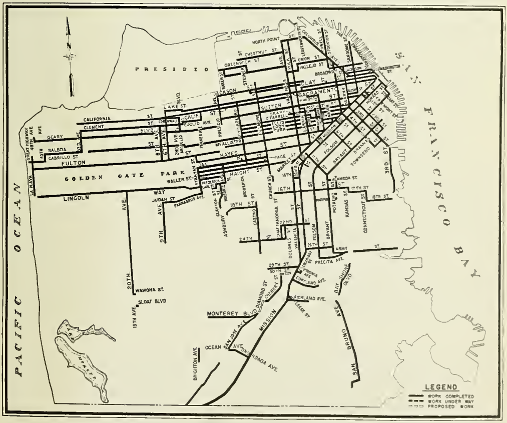


FIG. 4
TRACK REMOVAL PROGRAM

Track Removal Program

A $284,760 contract for the removal of cable car tracks on Jackson Street between Hyde and Steiner Streets was awarded July 13, 1960, and was completed in April 1961.

The track removal program, to date, has accounted for the removal of tracks from 113.27 miles of city streets. Still remaining to be removed, however, are 1.10 miles of abandoned tracks. Figure 4 shows the status of the track removal program as of June 30, 1961.

List of Accepted Streets

A supplement, bringing the list of accepted city streets to January 1, 1961, has been issued. All streets improved in the last calendar year are included in this supplement, as with various old streets that by inspection have been found to have standard improvements.

Eventually, all old streets that fall in this category will be recommended for acceptance to the Board of Supervisors.

DIVISION OF RECREATION AND PARK ENGINEERING

The Division of Recreation and Park Engineering of the Bureau of Engineering was established in February 1961 as a result of a Charter amendment transferring all professional engineering activities from the Recreation and Park Department to the Department of Public Works. As a result, this division reported for seven months to the General Manager of the Recreation and Park Department and five months to the City Engineer. Despite this transfer, the operations of the division did not change basically except that the personnel were relieved of any and all administrative duties affecting the Recreation and Park Department operations.

The division generally has been responsible for the preparation of plans and specifications for all major maintenance, repair, rehabilitation and improvements plus the inspection of any resulting construction work. In addition, it usually reported on all technical problems of any nature and prepared all estimates for any proposed additions, rehabilitations, repairs and the like.

Many projects carried out by the division require a considerable amount of landscape design and construction. As a result, a landscape architect heads a section of the division and prepares plans, specifications and estimates of cost for this activity besides advising the engineering inspectors during the construction phase. A part of the landscape architect's work is to advise and consult with other department personnel on projects that other bureaus are designing.

Some of the landscape projects worked on during the last fiscal year are:

1. The contract for the landscaping around the Hall of Flowers was completed this year and subsequently, under the direction of the landscape architect, more plants were added by the Park Division throughout the year selecting annuals to offer continuous color.

2. Final landscape plans were prepared and contracts let for Midtown Terrace and Silver Tree Day Camp.

3. A new development for the proposed Fragrance Garden of the arboretum located in Golden Gate Park to include a statue of St. Francis was prepared.

4. At the request of a neighborhood group from the east side of Diamond Heights, a study and cost estimate was prepared for a Bench Park at 30th and Laidley Streets.

5. Further studies of the Rehabilitation of the Music Concourse were prepared. Meetings were held with the Traffic Division, vehicular traffic being the crux of this problem. Meetings are still being held with the various staff members of the institution located in the park and affected by any change in the Concourse area.

6. Represented the Recreation and Park Department as city department staff member at meetings to review and criticize the plan for the Golden Gateway Redevelopment.

7. Acted as Recreation and Park Department liaison for the landscaping of the Arboretum Development, the Civic Center Plaza, the Portsmouth Plaza and the proposed Sunset Demonstration Gardens in the Arboretum.

8. A preliminary plan and cost estimate for a park development was prepared for the proposed Fort Funston Project to be located on property declared surplus by the Federal Government. This plan and cost estimate was used as part of a report prepared by the City Planning Department in explaining the best use for this piece of property. Several conferences with the staff of the Division of Beaches and

Parks of the State of California were attended in an attempt to arrive at a solution to save this area for park purposes.

9. Preliminary work has started on the rehabilitation of the Palace of Fine Arts.

Engineering division personnel have spent considerable time and effort in planning and preliminary design in conjunction with consulting architects and engineers for two large projects which were ready for final design at the close of the fiscal year.

The first of these projects is the Enlargement and Rehabilitation of the Marina Yacht Harbor, for which the City and County of San Francisco is in the process of obtaining a $1,500,000 loan from the California Small Craft Harbor Commission. The qualifications for obtaining the loan include submitting final plans and specifications which comply with numerous and complex requirements of the State Commission as well an Engineering and Economic Feasibility Report, all of which have to be checked and approved by the State Commission's staff before the loan is granted. In order to accomplish this work, engineering division personnel have made numerous trips to Sacramento and various other cities in California where the State Commission has met during the year for the purpose of consulting with the State Commission during their public meetings. Construction is presently scheduled to begin early in 1962.

The other project is the Development of McLaren Park, a 1955 Bond Fund Project, which, except for a swimming pool and 9-hole golf course, has been delayed until the necessary land within present park boundaries could be obtained and the streets closed. The land acquisition was complicated and delayed by the many court cases involving the private property owners and the City and County of San Francisco which ensued from the acquisition program. There is presently approximately $1,368,000 remaining in the 1955 Bond Fund for the remainder of this work, which includes roads, paths, reservoir, irrigation systems, fieldhouse, camping areas, a horticultural nursery, and other features to develop the area. A land utilization plan for the development of McLaren Park, which comprises approximately 330 acres and is the largest undeveloped park in the city, has been prepared by a group of consulting architects and engineers and it is estimated that $6,482,300 will be needed for full development of the area. Thus it can be seen that the amount remaining in the 1955 Bond Fund will provide for only a few initial basic features and over $5,000,000 more will be needed to complete the entire project. However, final design is now about to start on the various features mentioned above and the first construction contracts should be ready for bid late in 1961 or early in 1962.

A description of the architectural and engineering work carried out during the past fiscal year is presented hereinbelow under the various categories by which the money needed to finance them was made available and the status of the various projects at the end of the 1960-61 fiscal year.

CONSTRUCTION WORK

Started 1959-60 - Completed 1960-61

(The cost amounts shown cover only construction.)

Fleishhacker Pool Heating

The entire heating system of the pool was replaced with a new heating system that maintains a constant water temperature of about 70° F.

1955 Bond Fund	$ 77,465

Jackson Playground and Fieldhouse

The existing building was relocated and rehabilitated. The rehabilitated field area comprised baseball and softball diamonds, a tennis court, a basketball court and an apparatus area.

1955 Bond Fund	$136,045

Fencing Miscellaneous

A 6' high fence at St. Mary's Playground was replaced with an 18' high fence. Portions of the fence at Silver Terrace Playground were raised. The south fence of the 12th fairway at Sharp Park Golf Course was extended. Plans and specifications prepared by the engineering division.

Budget	$ 9,727

Golden Gate Park - Golf Course Clubhouse

The Golden Gate Golf Course Clubhouse was painted. Specifications were prepared by the engineering division for this work.

Budget	$ 725

Golden Gate Park - Hall of Flowers

This project consisted of the construction of a building containing an exhibition room, auditorium and club facility rooms. Plans and specifications were prepared by consulting architects.

Budget $548,288

HALL OF FLOWERS
GOLDEN GATE PARK

Golden Gate Park - Kezar Protective Wall

A wall to protect seated patrons was installed.

Budget .... $ 5,315

Zoological Gardens - Leopard Cage

Fabric was replaced on the leopard cage at the San Francisco Zoo. Specifications were prepared by the engineering division.

Budget .... $ 5,546

PROJECTS

Started and Completed
1960-61

Aquatic Park - Bocce Ball Courts
Phase I Development

Facilities for four regulation bocce ball courts, two of which will have roofs, were constructed in the westerly portion of this site. Plans and specifications were prepared by consulting engineers.

Budget	$ 15,304

Beach Chalet and Soccer Field - Irrigation

Installation of a new irrigation system for one soccer pitch was accomplished.

1955 Bond Fund	$ 8,000

Camp Mather Drainage Control Gate

The work consisted of the construction of a drainage gate for controlling the level of Birch Lake and a concrete platform for seasonal location of pumps to drain the lake when cleaning becomes necessary. Plans and specifications were prepared by the engineering division.

Budget	$ 3,800

Camp Mather Reconstruction

The work consisted of constructing a retaining wall and repairing the Lodge foundation. Plans and specifications were prepared by the engineering division.

Budget	$ 4,300

Eureka Valley Auditorium Heating

The work consisted of furnishing and installing new piping and appurtenances for hot water heating system. The original piping was destroyed by electrolysis. Plans and specifications were prepared by the engineering division.

Budget .... $ 2,496

Fleishhacker Playfield
Repairs to Mothers' Building

The work consisted of repairing the ornamental cast stone portions, railing posts, railing finials, urns, window frames and door pillars. Plans and specifications were prepared by the engineering division.

Budget .... $ 2,786

Fleishhacker Pool - Reconstruction of Walks

The work consisted of demolition of approximately one-half of the Portland cement concrete sidewalk around the pool and replacing it with an asphalt concrete pavement. Plans and specifications were prepared by the engineering division.

Budget .... $ 7,077

Golden Gate Park - Bison Paddock Fencing

Installation of new fence around Bison Paddock. Plans and specifications were prepared by the engineering division.

Budget .... $ 2,680

Golden Gate Park - Kezar Pavilion Painting

Plans and specifications were prepared by the engineering division to paint the entire exterior of the pavilion.

Budget .... $ 3,959

Golden Gate Park - Nursery Greenhouse

Work consisted of painting, caulking and repair of four greenhouses. Plans and specifications were prepared by the engineering division.

Budget .... $ 7,262

Harding Park Golf Clubhouse - Heating Plant

Removed the existing furnace heating system and replaced with new heating system, including two furnaces, duct work, automatic dumpers and registers. Plans and specifications were prepared by the engineering division.

Budget .... $ 5,127

Hayes Valley Floodlighting

Installation of an outdoor floodlighting system. Plans and specifications were prepared by consulting electrical engineers.

1947 Bond Fund .... $ 6,412

Hunters Point Recreation Center

The hot water heater and tank and the hot air furnace along with respective controls were replaced. Plans and specifications were prepared by the engineering division.

1947 Bond Fund .... $ 3,887

Larsen Park Irrigation

This work consisted of removal of the old irrigation system and installation of a new one. Plans and specifications were prepared by the engineering division.

1955 Bond Fund .... $ 7,176

Mission Park Clubhouse and Convenience Station
Phase I

The existing convenience station was rehabilitated with modern fixtures replacing the old ones, and rearranging the interior to provide additional space for the gardener's equipment and material. Plans and specifications were prepared by consulting architects.

Budget .... $ 13,248

Mission Park Clubhouse and Convenience Station
Phase II

The work involved in this project consisted of constructing a club room on the top of the combination convenience station and gardener's tool and supply rooms. Plans and specifications were prepared by consulting architects.

Budget .... $ 11,782

Mission Pool - Improvement to Filter Room

This work consisted in installing a new filter tank, circulating pump and related work. Plans and specifications were prepared by the engineering division.

Budget .... $ 3,260

Sharp Park Clubhouse Alterations

This work consisted of constructing a wood framed enclosure for the exterior porch, thereby providing more space for the restaurant and for the Proshop. Plans and specifications were prepared by consulting architects.

Budget .... $ 4,279

Zoo - Giraffe Moat

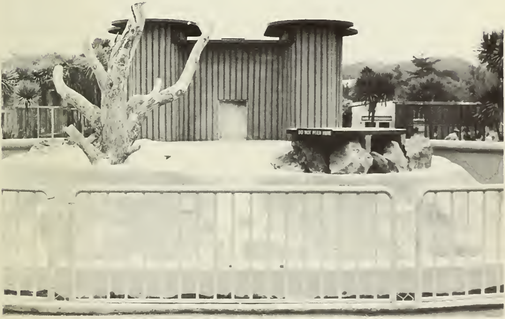
Constructed a concrete moat in front of the giraffe quarters. Plans and specifications were prepared by the engineering division.

Budget .... $ 9,670

Zoo- Gorilla Grotto

This work consisted of a concrete island enclosed by a 12' high wall with moat, a concrete apartment house for the gorillas and a mechanical room. This project also included a radiant heating system. Plans and specifications were prepared by consulting architects.

Budget .... $ 56,908



GORILLA GROTTO
SAN FRANCISCO ZOOLOGICAL GARDENS

Zoo-Fencing

Sections of fence were replaced around the perimeter of the zoo and in various animal paddocks. Plans and specifications were prepared by the engineering division.

Budget .... $ 6,503

Zoo - Repave Paths

Many paths and service roads were repaved, such as around the new gorilla grotto. Plans and specifications were prepared by the engineering division.

Budget .... $ 11,997

Rehabilitation of Various Hardwood Floors

This work consisted of sealing hardwood floors and painting gym court lines at St. Mary's, Sunset, Ocean View, Potrero Hill recreation centers and other recreation buildings in San Francisco. Plans and specifications were prepared by the engineering division.

Budget .... $ 10,295

Resurface Courts and Miscellaneous Work

Five tennis courts were resurfaced at Mission Dolores Park, one volleyball court at Mission Playground and eleven tennis courts in Golden Gate Park. Portions of chain link around the courts were also replaced. Plans and specifications were prepared by the engineering division.

Budget .... $ 31,968

PROJECTS

Started But Not Completed

1960-61

Alamo Square Irrigation System

A new irrigation system was designed and contract plans and specifications completed for same.

Estimated to cost .... $ 18,428

Aquatic Park Bocce Ball Courts - Phase II

This work consists of constructing a roof shelter over two of the existing bocce ball courts. Work in progress. Plans and specifications were prepared by consulting architects.

Budget .... $ 14,669

Chinese Playground - Reconstruction of Lavatories

Installation of new floors in the boys' and girls' lavatories and the club room, and new walls and plumbing fixtures in the lavatories were carried out. Plans and specifications were prepared by the engineering division.

Budget .... $ 5,034

Golden Gate Park - Music Concourse

Plans and specifications were prepared by the engineering division for the replacing of the surface drainage of this area, including manholes, catchbasins, drains and the like, all to be connected to the new 20-inch outfall sewer servicing the Academy of Sciences and financed by Sewer Bonds. This project should be under construction in the late summer of 1961.

Estimated cost .... $ 7,700

Golden Gate Park - Beach Chalet and Soccer Fieldhouse

Plans and specifications have been completed to rehabilitate the dressing rooms and convenience station so that the interior space of the building can better serve the players. There will be two separate dressing rooms, showers, men's and women's toilets in the new arrangement.

Estimated cost .... $ 5,000

Golden Gate Park - Additional Nine-hole Pitch and Putt Golf Course

Plans and specifications were prepared for an additional nine-hole section of the pitch and putt golf course. It is estimated that this project will cost in excess of $200,000. However, no money has been appropriated for construction purposes.

Harding Golf Course Conversion

The conversion of a 6-hole practice course to a 9-hole regulation course is now in progress. Plans and specifications were prepared by the engineering division.

Budget .... $ 32,800

Holly Park - Irrigation System and Playground Rehabilitation

Plans and specifications have been started to replace and inadequate and worn out irrigation system, replace and enlarge the play facilities for pre-school children, construct a new convenience station, rehabilitate the old one and construct a new tennis court, all of which is estimated to cost .... $ 85,000

Lake Merced Sailing Site - Launching Facilities

Plans and specifications prepared and contract awarded for the construction of a launching dock for the purpose of launching all types of sail boats directly into the lake from trailers with the aid of a hoist.

Estimated cost .... $ 50,824

McCoppin Square

This work consists of the conversion of a convenience station into a fieldhouse by adding two more rooms. Work in progress. Plans and specifications were prepared by consulting architects.

1955 Bond Fund .... $ 20,028

McLaren Park Golf Course - Clubhouse

This work consists of the construction of a clubhouse for the new golf course. Work in progress. Plans and specifications were prepared by consulting architects.

1955 Bond Fund .... $ 42,670

McLaren Park Golf Course - Irrigation

This work consists of installing a new irrigation system, turfing and related work for a new full length 9-hole golf course. Work in progress. Plans and specifications were prepared by consulting architects.

1955 Bond Fund $228,537

Midtown Terrace - Phase I

This project consists of the construction of a new playground, including fieldhouse, apparatus area and playfield area. Work in progress. Plans and specificiations were prepared by consulting architects.

Budget .... $ 65,849

FIELDHOUSE AT MIDTOWN TERRACE PLAYGROUND
Olympia Way and Clarendon Avenue

Midtown Terrace Playground - Phase II

Design of the playground facilities on top of the Mt. Sutro Reservoir was started. Also, plans for the fencing, landscaping and similar items are being prepared for the entire reservoir site. This project should be under construction in the fall of 1961.

Estimated cost	$ 77,700

Silver Tree Day Camp

Construction of a day camp, including a building containing club rooms, shower rooms, craft room, kitchen and a balcony for possible outdoor sleeping. The project also includes the development of the surrounding area. Construction work in progress. Plans were prepared by the engineering division.

1955 Bond Fund	$128,658

LODGE AT SILVER TREE DAY CAMP
Glen Canyon

Helen Wills Playground

This project consists of demolishing the existing fieldhouse and the construction of a new building to be erected in a more desirable location. Playground will have a new apparatus area, a tennis court, basketball court and softball layout. Work in progress. Plans and specifications were prepared by consulting architects.

1955 Bond Fund	$ 79,617

FIELDHOUSE AT MIDTOWN TERRACE PLAYGROUND
Olympia Way and Clarendon Avenue

Midtown Terrace Playground - Phase II

Design of the playground facilities on top of the Mt. Sutro Reservoir was started. Also, plans for the fencing, landscaping and similar items are being prepared for the entire reservoir site. This project should be under construction in the fall of 1961.

Estimated cost	$ 77,700

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1955 Bond Fund	$ 79,617

RECAPITULATION

		CONTRACT PRICE OR ESTIMATED COST			
	No of Projects	Budget Funds	Bond Funds		Total
			1947	1955	
Work in progress at start of fiscal year..........	7	$ 569,601	$ -0-	$213,512	$ 783,113
Plans, specifications and construction started and completed during fiscal year..	24	214,701	10,299	15,176	240,176
Plans, specifications completed and construction started........	9	118,352	128,658	370,852	617,862
Plans and specifications completed but construction not yet started (These amounts are estimated)..	7	290,400	-0-	154,252	444,652
Totals	47	$1,193,054	$138,957	$753,792	$2,085,803

DIVISION OF DESIGN

The Division of Design is responsible for designing and preparing plans and specifications for sewers, sewage treatment facilities, structures, other than streets and highways, landslide correction, high pressure water system, landscaping, street lighting, and electrical and mechanical work on public buildings, and street work.

In addition, problems relating to the disposal of garbage are investigated, utilities and underground structures information is recorded and city projects coordinated with projects and facilities of public utilities, cost estimates are prepared, and cost records kept.

SPECIFICATIONS AND ESTIMATES

The Bureau of Engineering project plans and specifications, except those involving street reconstruction or assessment work, prepared by various sections, are reviewed for completeness and correctness. This material is amplified, as required for public works contracts, and proper methods of payment are determined for the various phases of construction and classes of work.

Legal requirements and restrictions are checked with appropriate codes and authorities, such as the City Attorney's Office and the Office of the Clerk of the Board of Supervisors, and project specifications are set up accordingly. The site of proposed contract work is inspected so that provision can be made in the specifications to forestall possible complications in the field during construction.

The Standard Specifications and other materials are revised from time to time in order to keep pace with current requirements and modern Engineering practices.

An estimator computes all contract costs, except for certain highway, mechanical and electrical work, for which estimates are prepared by the originating section. In addition, he may be called upon to assist these sections in estimating portions of their work involving sewers, tunnels, bridges or other structures, or pile driving. The estimator compiles cost records from information recorded in the field. These records, which are somewhat akin to time and motion studies, are used by the estimator in figuring subsequent project costs. Costs are also checked with utility companies if their facilities are affected by City contracts.

UTILITIES AND UNDERGROUND STRUCTURES

Part of the work of the Division of Design is to acquire, compile and coordinate the records of all underground structures in public streets in connection with Department of Public Works contracts and to investigate the submitted data to resolve errors, discrepancies and interferences; investigate complaints in connection with Department of Public Works contracts; investigate applications for permission to set poles in public streets; act as liaison between the City and interested utility companies, agencies, private firms or persons; investigate requests for and protests against Underground Districts; prepare ordinances and assist in the enactment of legislation for the establishment of such districts, and coordinate the efforts of affected utilities in compliance therewith; make investigations and reports as required for other City departments; and evaluate City, State and Federal codes and regulations affecting the work of this department.

25 Underground Districts were suggested, of which 14 were requested by property owners and 11 were in connection with proposed City work. Legislation was undertaken for 5 districts and completed for 4. Since by law only 2-1/2 miles of city streets can be declared underground in each year, a tentative 5-year program is prepared periodically, scheduling as many districts as possible, in the order received, but with priority to City projects. The remaining requests are retained for scheduling in subsequent years in a continuing program. To date 165 Districts, totaling 150 miles of City streets, have been formally declared.

SEWERAGE SYSTEM

The extension, reconstruction, improvement and increase in capacity of the sewerage and drainage system progressed during the year, financed principally by recent sewer bond issues. Plans and specifications were prepared for new construction or replacement of storm, sanitary or collecting sewers, sewer structures and pumping stations, and for the modernization and improvement of three sewage treatment plants.

The reviewing of plans and specifications prepared by other governmental and private agencies continued, the most notable of which were:

Southern Hills #2 Subdivision
Diamond Heights Redevelopment Area
Miraloma Park Subdivision No. 11
Southern Freeway: Mission Street to Ocean Avenue
Western Addition Redevelopment Area
Portsmouth Square Garage

Investigation of sewers and drainage continued in relation to flooding and complaints, street closings, new spur tracks, acquisition or abandonment of easements, and various improvement projects.

AGREEMENTS

Agreements were negotiated with the Bayshore Sanitation District and with the North San Mateo County Sanitation District whereby the City will, for a limited number of years, handle and treat sewage originating in San Mateo County and receive reimbursement for such service.

In connection with the State contract for the construction of the Southern Freeway, an agreement was signed whereby the State will reconstruct the Alemany Sewer to such increased size as required by the City for its future needs, and the City will reimburse the State for the cost of the additional capacity.

Agreements were signed with the Western Pacific Railroad Company and with the Southern Pacific Company in connection with the City's construction of the Division Street Auxiliary Sewer. Under the agreements the City will be reimbursed certain amounts, based on contract bid items, to cover the cost of additional sewer strength and additional piles required under track crossings in order to carry the added loads imposed by trains.

An agreement is being prepared whereby the Panorama Development Company and the Crocker Estate will reimburse the City for additional capacity required in the City's sewer system to accommodate the storm flow from their development near the County Line. The amount to be paid to the City, estimated at present as $106,000, will be used to defray the additional capacity cost of the proposed South Hill - Rolph Street Sewer.

NEW STANDARDS

The new standard materials and methods introduced into sewer construction during the year consisted of:

Precast concrete manhole on existing brick sewer
Reinforced concrete saddle manhole on R.C.P. sewers
Sand backfill for all V.C.P. sewers

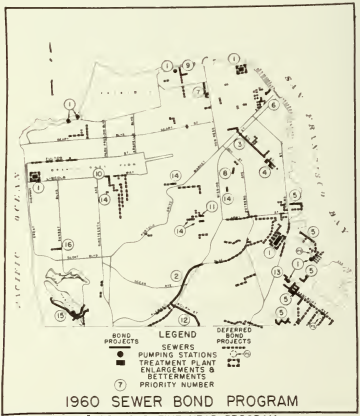
FUNDS EXPENDED

The major sewer contracts awarded during the fiscal year, including collecting sewers and sewers constructed under major street reconstruction contracts, exclusive of assessment projects, were as follows:

Sewer Extensions, Replacements and Auxiliary for Increased Capacity	$ 680,000
Sewers in Street Reconstruction, Widening and Track Removal Contracts	$ 103,000
Sanitary Collecting Sewers and Pumping Stations	$ 355,000
	$1,138,000

1960 SEWER BOND ISSUE

A $12,500,000 Sewer Bond Issue for a sewer program consisting of 16 urgently needed projects was approved by the Board of Supervisors and by the electorate. Funds are now available for a continuing program to extend, replace and enlarge sewers, to intercept, collect and divert sewage to treatment plants and pumping stations, and for additions and improvements at the treatment plants.



1960 SEWER BOND PROGRAM

$12,500,000 FIVE YEAR PROGRAM

FIG. 5

SEWER BOND ISSUE BALANCES

The original amounts available and the balances in the currently active bond accounts at the end of the fiscal year were as follows:

	Bond Issue Total	Approximate Balance
1944 Sewer Bonds	$12,000,000	$ 425,000
1948 Sewage Treatment Bonds	15,000,000	98,000
1954 Sewer Bonds	12,645,000	3,577,000
1960 Sewer Bonds	12,500,000	12,500,000

Sewer Extensions, Replacements and Auxiliary for Increased Capacity

VICENTE STREET SEWER

In order to relieve flooding in Vicente Street between 32nd and 33rd Avenues, an auxiliary sewer, consisting of 270' of 36" diameter spun reinforced concrete pipe, was constructed in this block at a contract cost of $19,750.

The extension of this auxiliary sewer west of 33rd Avenue to 45th Avenue is now being planned to eliminate the flooding in this block. Contract is scheduled for the 1961-62 fiscal year.

FOERSTER STREET SEWER

The existing 24" diameter sewer in Foerster Street between Teresita Boulevard and Melrose Avenue was found to be inadequate. This situation was alleviated by the construction of 163' of 33" diameter V.C.P. sewer on reinforced concrete foundation at a contract cost of $12,400. Because this area has been subject to slides, and because of the presence of ground-water, a permanent sub-drain was installed beneath the sewer.

30th AVENUE SEWER

Complaints of basement flooding were received and investigation disclosed that the existing 8" diameter sewer between Clement and Californis Streets was inadequate. Construction of 340' of 15" diameter V.C.P. sewer, at a contract cost of $9,155, is expected to reduce danger of further flooding.

FRANKLIN-BAY STREET SEWER, SECTION A

Flooding of streets and basements has occurred along Franklin Street between Union and Lombard Streets, and along Union Street west of Franklin Street. Investigation disclosed that the Franklin Street Sewer and the Lombard - Laguna outlet sewer were inadequate. An auxiliary sewer is now being constructed in Franklin Street from Lombard to Bay Street and in Bay Street from Franklin to Laguna Street in order to alleviate the flooding problem. A contract was awarded for 2500 linear feet of reinforced concrete pipe sewer in diameters of 54", 60" and 72" at a contract cost of $296,000 and was 26% complete at the end of the fiscal year.

A second unit, in Franklin Street between Lombard and Union Streets, to complete relief of the flooding condition, is scheduled for future construction.

NORTH POINT STREET SEWER

Settlement in the street area and breaks in the sewer in North Point Street between Broderick and Divisadero Streets necessitated the construction of 340 linear feet of 12" diameter V.C.P. sewer to replace the existing deteriorated and inadequate 8" diameter sewer at a contract cost of $8300.

BUSH STREET SEWER, BRODERICK TO BAKER STREET

Methods of sewer photography now being used by the City disclosed that portions of the existing 15" and 16" diameter sewers had collapsed. A contract was awarded in May 1961 for construction of 18" diameter V.C.P. sewers in this area at a contract cost of $15,100, construction to begin in the 1961-62 fiscal year.

SEWER IN GOLDEN GATE PARK FOR ACADEMY OF SCIENCES BUILDING

In order to adequately serve the Academy of Sciences buildings, including the new aquarium addition, and to improve the drainage in the concourse area, a sewer was installed from the Aquarium to Fulton Street and 10th Avenue to supplement the existing inadequate sewer. A contract for the construction of 1600 linear feet of vitrified clay and reinforced concrete pipe sewers varying from 15" to 24" in diameter, at a cost of $39,950, was awarded, and work was 82% complete at the end of the fiscal year.

SEWERS IN WESTERN ADDITION REDEVELOPMENT

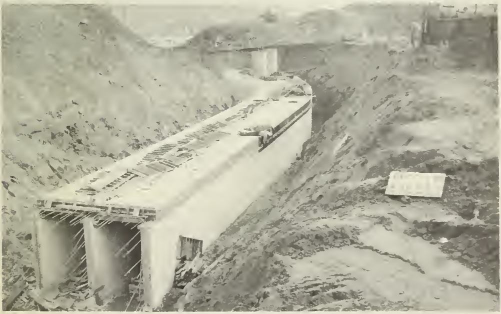
The program of replacement of sewers in poor condition or in need of additional capacity in the Western Addition Redevelopment Area A-1 was continued.

The existing 16" diameter cement pipe sewer in O'Farrell Street between Pierce and Scott Streets was replaced with a 21" diameter V.C.P. sewer, at a contract cost of $18,200.

The existing 16" cement pipe sewer in Eddy Street from Octavia to Van Ness Avenue was found to be in poor condition and inadequate for present needs. A contract for the replacement of these sewers with vitrified clay pipe varying from 12" to 18" in diameter, at a cost of $47,000 was awarded in May 1961 and construction scheduled to begin early in the 1961-62 fiscal year.

ALEMANY BOULEVARD SEWER

The construction of the Southern Freeway under State contract, east of the Mission Viaduct, necessitated the removal and replacement of the existing 8'1" x 10'3" reinforced concrete sewer in Alemany Boulevard. At the request of the City, the sewer will be reconstructed to its ultimate required size of two 6' x 10' rectangular compartments. The construction cost of the increased capacity is to be borne by the City under an agreement with the State, as described hereinbefore, and is estimated to be $209,000.



ALEMANY BLVD. SEWER
DOUBLE BOX SEWER 6' x 10'

DIVISION STREET AUXILIARY SEWER, SECTION A

Plans and specifications were completed and contract is scheduled for 1961-62 fiscal year. The work consists of an 8'3" x 9'6" reinforced concrete compartment needed to supplement the existing sewer in Division Street from 10th Street to DeHaro Street. The necessary agreements with the Western Pacific and Southern Pacific railroads for participation in the expense, as hereinbefore described, have been signed.

INGALLS AND VAN DYKE STREET SEWERS

Plans and specifications were completed for sewers in Ingalls Street from Underwood to Yosemite Avenue and also in Van Dyke Street from Jennings to Ingalls. These sewers will be constructed under separate assessment contracts.

CAYUGA AUXILIARY SEWER

Hydraulic studies and plans are under way for a proposed sewer in Alemany Boulevard between Mission Viaduct and Niagara Street in order to relieve flooding and supplement the existing sewer in Cayuga Avenue.

SOUTH HILL - ROLPH STREET SEWER

Studies are progressing and plans are being prepared for a sewer in South Hill Boulevard and in Rolph Street from the County Line to a junction with the proposed Cayuga Auxiliary Sewer at Niagara Street and Alemany Boulevard. This sewer is necessary to provide for the increased flows expected from the Panorama Heights Development located near the County Line and South Hill Boulevard. Contract is scheduled for the 1961-62 fiscal year.

Sewers in Street Projects

Sewerage and drainage work was incorporated in contracts for street widening, street reconstruction and track removal projects, at the costs indicated

Lincoln Park Roads	$ 6,000
Jackson Street Track Removal Hyde to Steiner Street	$50,000
Geary Expressway Contract #3 Masonic to Franklin Street	$46,000
Gold Street Reconstruction	$ 1,000

Guniting Old Brick Sewers

29th STREET, SANCHEZ TO SAN JOSE AVENUE

Contract for gunite lining, at a cost of $20,304, was awarded during the 1959-60 fiscal year and completed during the 1960-61 fiscal year.

SEWAGE INTERCEPTING SYSTEM

Contracts either completed or awarded for the construction of the sewage intercepting system continued to be processed and at the end of the fiscal year only the following 8 contracts for the sewage intercepting system remained to be advertised:

N.P.C.S. Sec. B-3A	Drumm Street Pumping Station	$470,000
N.P.C.S. Sec. B-3b	Washington Street Force Main	$ 52,000
N.P.C.S. Sec. B-3C	Washington Street - Drumm Street Sewers	$120,000
N.P.C.S. Sec. C-1	Embarcadero Sewer, Brannan to Townsend Street	$285,000
N.P.C.S. Sec. C-2	Berry St. Sewer, Townsend to Third St	$300,000
N.P.C.S. Sec. D-3	7th Street Diversion Structure	$375,000
N.P.C.S. Sec. D-9	4th Street Siphon	$ 40,000
S.E.C.S. Sec. K-2A	20th Street Pump Station and Force Main	$ 75,000

The first three contracts are for the Dumm Street Collection System which has been delayed until June 1962 by the necessity of first relocating the produce merchants to their new Islais Creek site.

The next two contracts (Sections C-1 and C-2) are to be advertised in October 1962. Section D-3 is still under study by the Southern Pacific Company. The remaining two projects will be designed during the 1961-62 fiscal year.

Progress of Contracts Awarded Prior to Fiscal Year 1960-61

N.P.C.S. Section B-2 The Embarcadero Intercepting Sewer - Market Street to Jackson Street - Construction completed.

N.P.C.S. Section D-1 Fourth Street Pumping, Station, Diversion Structure and Intercepting Sewer - Construction completed.

N.P.C.S. Section D-2 Fourth Street Force Main - Construction was started and completed on this contract, consisting of 3612 linear feet of 30" diameter concrete cylinder Pipe sewer all in Fourth Street from Howard Street to the Fourth Street Pumping Station near the channel, at a cost of $255,588.

N.P.C.S. Section D-4 Berry Street Intercepting Sewer - The contract was awarded in June 1960; construction was started and was about 65% completed at the end of the fiscal year. This sewer, consisting of 2330 linear feet of 2'6" x 3'9" egg-shaped reinforced concrete sewer on piles, located in Berry Street between Fourth and Seventh Streets, will transport the raw sewage intercepted from sewers in 5th, 6th and 7th Streets and deliver it to the Fourth Street Pumping Station. Contract cost is $309,129.

Progress of miscellaneous contracts awarded prior to fiscal year 1960-61

Fitzgerald Pumping Station - Replace Pumping Facilities - Completed.

R.S.S.T.P. - Sludge Control House - Replace Exhaust Ventiliation - Completed.

N.P.S.T.P. - Effluent Lines, Piers 33 and 35 - Repair - Completed.

Progress of contracts awarded during fiscal year 1960-61

N.P.C.S. Section D-8 Berry Street Intercepting Sewer, Third Street to Fourth Street - Plans and specifications were completed, the contract was awarded and construction was begun on this contract, which was 64% complete at the end of the fiscal year. Cost is $149,897. The work includes the construction of a diversion structure in the Third Street Sewer at Berry Street and 1000 linear feet of 2'6" x 3'9" egg-shaped reinforced concrete sewer on piles in Berry Street, which will deliver an average dry weather flow of 0.1 m.g.d. to the Fourth Street Pumping Station and increase the area covered by the station by 41 acres.

N.P.C.S. Sections D-6 and D-7 - Fifth Street and Sixth Street Diversion Structures and Intercepting Sewers - Plans and specifications were completed, the contract awarded and work begun on this contract, which was 25% complete at the end of the fiscal year. Cost is $205,887. The work includes the construction of diversion structures and intercepting sewers in 5th and 6th Streets and will provide for diversion of an average dry weather flow of 0.3 m.g.d. from 67 acres that previously discharged into the channel.

Miscellaneous Additions and Betterments Projects

S.E.S.T.P. Digester Piping Revisions Group No. 1 - Awarded in May 1961 at a contract cost of $161,860; work to commence in 1961-62 fiscal year.

S.E.S.T.P. Steel Sludge Storage Hopper - Awarded in May 1961 at a contract cost of $161,860; work to commence in 1961-62 fiscal year.

Contracts scheduled to be awarded during fiscal year 1961-62

N.P.C.S. Section C-1 - Sewers and diversion structures to divert sewage from an area of 414 acres, now discharging to the bay at Brannan, Townsend and Bryant Streets. Sewage will be pumped by Fourth Street Pumping Station. Estimated contract cost: $285,000.

N.P.C.S. Section C-2 - Sewers linking Section C-1 (above) with Fourth Street Pumping Station and diverting from an area of 10 acres, raw sewage now discharging to the bay at Berry Street. Estimated contract cost $300,000.

N.P.C.S. Section B-3A - Drumm Street Pumping Station was advertised for bids in May 1961, but receipt of bids was indefinitely postponed because of unforeseen delay in the relocation of the produce merchants. Construction is expected to start by June 1, 1962. Estimated contract cost: $470,000.

Lake Merced Sewer System - Sewers, pumping station and force main to collect sewage from an area of 400 acres. Provides for elimination of 2 pumping stations in the immediate area of Lake Merced. Estimated contract cost: $300,000.

Log Cabin Ranch School for Boys, Sewage Treatment Plant Alterations — Sewage lagoon to improve quality of discharge of sewage to nearby creek; piping and miscellaneous improvements. Estimated contract cost: $35,000.

Sunset Pumping Station Enlargement (Richmond-Sunset Sewage Treatment Plant) and Miscellaneous Improvements - Increase pumping capacity of station to divert raw sewage for treatment: now discharging to ocean. Estimated contract cost: $225,000.

Quint Street Grease Trap (Quint Street Interceptor Sewer) - Construction of large grease trap to eliminate frequent plugging and subsequent expensive cleaning operation. Estimated contract cost: $20,000.

Yosemite Pumping Station: Sand Removal System and Miscellaneous Improvements - Revise sump and pumping facilities to eliminate necessity of present expensive cleaning methods. Estimated contract cost: $12,000.

Southeast Collecting Sewers, Section K-2A - Construct pumping station and force main for 20th Street sewer, now discharging to the bay. Estimated contract cost: $75,000.

Mechanical Engineering Support to Sanitary Activities

Extensive studies were initiated to develop plans for the most effective use of funds made available by the 1960 Sewer Bond Issue for additions and betterments in the three sewage treatment plants. This planning will result in a number of contracts for the orderly improvement of equipment and processes in the plants in the years ahead.

A program was undertaken to isolate the potable water supplies in existing sewage pumping stations. The purpose of such isolation is to prevent any possibility of contamination of the Water Department facilities by accidental backflow of contaminated water from within the stations. While no such incidents are known to have occurred, both the Federal and the State public health authorities have expressed concern that the potential for cross-connection existed in some of our sewage treatment facilities. The corrective work, on which $13,986 was expended during the year, will give assurance of safety.

LANDSLIDE CORRECTION

A second year of sub-normal rainfall brought no reports of new slides, and existing slides under observation showed little or no movement. The rainfall for San Francisco from July 1, 1960, to June 30, 1961, was 14.14 inches. This is only 69.4% of average annual normal, and a decrease of nearly 10% from the rainfall reported for the year 1959-60. The highest monthly precipitation was 3.35 inches during November.

As in the past, the Bureau of Sewer Repair makes weekly measurements of flows from drains constructed in slide areas. This information is analyzed to determine effectiveness of the drainage systems and the need for additional work. In addition, survey measurements are made periodically at many of the slide areas to determine their rate of movement. Slide areas in which the City has completed construction of drainage systems were found to be in relatively stable condition.

PARKER AVENUE SLIDE

No change of any significance has been observed in this slide. The corrective drainage system constructed during 1959 has been functioning properly. Measurements of underground drainage from this slide area indicate approximately 25,000 gallons of water is drained per day, which is about the amount of drainage observed during the previous year.

INGERSON AVENUE SLIDE

Movement of this slide since construction of the viaduct over the slide area has been insignificant. The 12 Carlson strain-meters embedded in the foundation piles of the viaduct are under periodic observation to determine any build-up of forces against the piles due to the slide. Readings during the past year indicate an increase in stress in the reinforcing steel of less than 500 lbs./sq. in. This change is relatively minor. Movement and subsidence surveys and strainmeter readings will continue to be taken at regular intervals.

EL CAMINO DEL MAR SLIDE

Final design of a bridge to span the east slide area is now almost completed. The design is for a 4-lane, 3-span, welded steel plate girder bridge with end spans of 95 feet and a center span of 280 feet. Depths of the girders at the supports and center will be about 15 feet and 8 feet respectively. Intermediate piers will be supported by drilled, cast-in-place, reinforced concrete piling to sound bedrock. Total width of the bridge will be 58'6", with a 48-foot roadway and an 8-foot sidewalk.

In addition to the proposed bridge construction, plans are also being prepared to reconstruct the roadway and pavement in the west slide area after the installation of an intercepting drainage system.

Movement and subsidence survey measurements have been continued on a tri-monthly basis to keep the areas under observation. Relative movements at all points have been small in comparison with those of past years. Maximum movements during the past year was 4-1/2 inches.

CANDLESTICK PARK ACCESS ROADS SETTLEMENT SURVEYS

Survey measurements of the vertical and horizontal movements of the various reference points in the access roads to Candlestick Park have continued at 6-month intervals.

The following are the total average settlements recorded as of June 30, 1960, and June 30, 1961:

Streets	Original Survey	Total Settlement 6/30/60	6/30/61
Fitch, Carroll to Gilman	Sept. 1959	0.02 feet	0.03 feet
Gilman, Fitch to Hunters Point Expressway	Sept. 1959	0.22 feet	0.46 feet
Hunters Point Expressway, Gilman to Jamestown	Aug. 1959	0.56 feet	0.99 feet
Jamestown Extension, Harney Way to Hunters Point Expressway	Oct. 1959	0.38 feet	1.00 feet
Harney Way, Jamestown to McKinley Avenue	Nov. 1959	0.03 feet	0.05 feet
Harney Way, McKinley Avenue to Bayshore	Dec. 1959	0.22 feet	0.55 feet

AUXILIARY WATER SUPPLY SYSTEM

Work on this system includes extensions, relocations and adjustments necessitated by street reconstruction work.

Progress on contract awarded prior to fiscal year 1960-61

Grove Street Extension - Construction was started and completed within this fiscal year, at a cost of $17,890. This extension of the system linked the 18" high pressure main in Van Ness Avenue with the 14-inch high pressure main in Larkin Street with 885 linear feet of 10-inch main, and included 3 high pressure fire hydrants.

Progress on contract awarded during fiscal year 1960-61

Geary Expressway Contract No. 3 - The changes in the street lines for Geary Expressway from Divisadero to Steiner Streets and from Buchanan to Gough Streets necessitated the relocation of 6 high pressure hydrants, which required the removal of 180 linear feet of 18", 12" and 8" pipe and the installation of 380 linear feet. The high pressure relocation items in the contract totaled $32,343.

Contracts scheduled to be awarded during fiscal year 1961-62

Filbert Street Extension - An extension to the AWSS facilities in Filbert Street between Montgomery Street and Napier Lane. Installations Contract. Estimated contract cost: $22,500.

Baker Street Extension - An extension to the AWSS facilities in Baker Street from Jefferson Street to Yacht Harbor. Installation contract. Estimated contract cost: $40,000.

Evans Avenue Reconstruction - The raising of the existing AWSS facilities in conjunction with street reconstruction. Estimated contract cost (AWSS work): $40,000.

Webster Street Widening - The relocating of AWSS and low pressure water supply facilities necessitated by the street widening. Estimated contract cost (AWSS work): $4,000.

Western Addition - The relocating of various AWSS and low pressure water supply facilities necessitated by revision to street patterns. Estimated contract cost (AWSS work): $7,500.

AWSS Materials and Standards

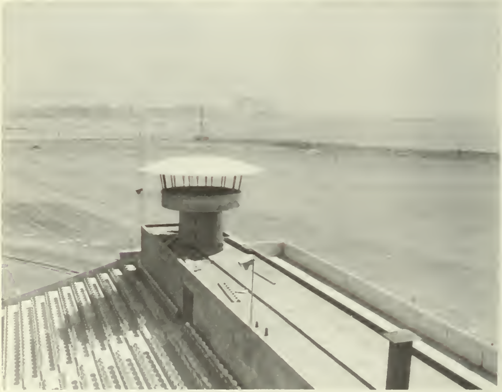
It became apparent recently that the materials and details long used as standards in the auxiliary water supply system were becoming archaic and that the cost of these items is far greater than for similar products used by utility systems. Accordingly, a program has been initiated by our mechanical engineers to review the specifications and drawings for the standard items required for each alteration or extension of the system and include therein references to modern manufacturing techniques, recent developments in metallurgy, and the latest testing procedures, all designed to assure the City of a maximum amount of fire protection at a minimum cost. This program produces a series of interim standards which will eventually result in an entire new set of permanent standards.

An interesting development of the program is the almost complete abandonment of cast iron for fittings in favor of cast steel and the introduction of radiographic examination methods for locating deep defects in the casting which might cause leaks to develop after the fittings were placed in service. Such defects can be readily corrected by welding before the fittings are accepted.

PUBLIC BUILDING CONTRACTS

CANDLESTICK PARK TRAFFIC CONTROL TOWER

Construction of a tower to provide a central station for the Police Department to observe and direct traffic at Candlestick Park, completed during the past fiscal year at a cost of $25,000. The tower rises 17 feet above the promenade on the eastern bleachers. The unique feature of this project was the 25 foot diameter thin concrete dome, which was poured on the ground and lifted into place.



CANDLESTICK PARK
TRAFFIC CONTROL TOWER

CANDLESTICK PARK VISUAL BACKGROUND FENCE

A visual background fence to ensure visibility of pitched balls was constructed at a contract cost of $36,234.

CANDLESTICK PARK ADDITIONAL ENTRANCE GATES

Correction of traffic problems in the parking area required the construction of three 20-foot gates in the fence around the parking area. Contract was for $906 and the work was 90% complete at the end of the fiscal year.

CANDLESTICK PARK UPPER DECK RAILING

Installation of guard screen on the upper grandstand; scheduled for the 1961-62 fiscal year; estimated contract cost: $5,000.

SAN FRANCISCO HOSPITAL - REPAIRS TO POWER PLANT CHIMNEY

Plans and specifications were prepared and the contract scheduled to be awarded in the 1961-62 fiscal year. Estimated contract cost: $6,000.

The existing chimney was constructed in 1911 and shows cracks extending through a 3/4-inch plaster outer shell into the reinforced concrete. Repairs are necessary to bring the chimney to present day standards to seal the existing cracks, thereby protecting the existing steel reinforcement against corrosion and to reinforce the chimney as a whole. The repair work will consist of removal of the existing plaster, sandblasting the surface, placing a 2" x 2" No. 12 wire mesh reinforcement and placing a 2" thick coating of gunite over the entire surface.

CITY HALL REST ROOMS

This year saw further progress in the program of gradual modernization and improvement of rest room facilities in the City Hall. This year's work was concentrated in the southeast quadrant of the building at a contract cost of $19,666 and was 90% complete at the end of the fiscal year.

Miscellaneous contracts awarded during 1960-61 fiscal year

Stockton Street Tunnel at Bush Street - Modify East Stairway - Awarded at a contract cost of $14,290. Completed.

Veterans Building and Opera House Basements - Eliminate Seepage - Awarded at a contract cost of $4,036. Completed.

Municipal Asphalt Plant Storage Facilities - Awarded at a contract cost of $7,132. Completed.

Fire Department Pumping Stations 1 and 2 - Pilot Flame Failure Protection - Awarded at a contract cost of $5,974. Completed.

County Jail No. 2 - Heating System - Awarded at a contract cost of $6,974. 95% complete at end of fiscal year.

Glendale Street at Corbett Avenue - Retaining Wall, Stairs and Lighting - Awarded at a contract cost of $6,899. Completed.

Kearny Street near Chestnut Retaining Wall - Awarded in June 1961 at a contract cost of $1,874. Construction to start in 1961-62 fiscal year.

Laguna Honda Home - Alterations to Refrigeration System - Awarded in June 1961 at a contract cost of $65,974. Construction to begin in 1961-62 fiscal year.

Youth Guidance Center Boys Clinic Ventilation - Awarded in June 1961 at a contract cost of $1,387. Construction to begin in 1961-62 fiscal year.

City Hall Assessor's Office Ventilation - Awarded in June 1961 at a contract cost of $7,826. Construction to begin in 1961-62 fiscal year.

Miscellaneous contracts awarded during 1959-60 fiscal year and completed during 1960-61 fiscal year

Presidio Branch Library - Replace Boiler

Candlestick Park Fire Protection System

Candlestick Park Bus Loading Area - Lighting

BUILDING LIGHTING

In addition to its work of building rehabilitation, the Bureau of Engineering let contracts for the improvement of lighting in the following public buildings:

Voting Machine Warehouse	$4,875
Golden Gate Valley Branch Library	$5,185
County Clerk's Office	$7,766

The work done in the County Clerk's office is worthy of special notice. This lighting has been the subject of favorable comment by all who use the records held by the County Clerk. In this instance, the engineering analysis proved that a satisfactory result could be obtained with an inexpensive lighting fixture. The bid price and the satisfaction of those working in the office are proof of the analysis.

Progress of contracts awarded
during 1959-60 fiscal year

City Hall - Assessor's Office: Completed

Sunset Branch Library: Completed

Richmond and Presidio Branch Libraries: Completed

ISLAIS CREEK BRIDGE MACHINERY RECONSTRUCTION

Plans and specifications were prepared and contract awarded in the amount of $109,620. Work completed during fiscal year.

Some years ago it became evident that severe local stresses were being developed in the machinery which raises and lowers the leaves of Islais Creek Bridge. Some of the parts had been so badly strained as to require emergency replacement. A thorough study by our mechanical engineering staff and by a consulting mechanical engineer indicated that extensive revision of the machinery and control system were necessary to assure that the massive moving parts of the structure remain safely under control at all times and that no localized danger points develop in the complicated machinery which might cause a serious accident.

STEINHART AQUARIUM SALT WATER SUPPLY SYSTEM

Sea Water Collector at Ocean Beach for the Steinhart Aquarium Salt Water Supply System - Contract awarded in June 1961: work to commence in 1961-62 fiscal year. Contract cost: $79,250.

Pumping Station and Pipeline

Contract scheduled to be awarded in 1961-62 fiscal year.

The matter of providing an adequate salt water supply for the Steinhart Aquarium, which has been under study since early 1959, progressed rapidly toward solution during this fiscal year. A report from the consulting firm engaged to determine the feasibility of the infiltration type of sea water collectors was favorable and a contract was awarded, as noted above. This facility will provide a source of clear ocean salt water which will be ample for the needs of the aquarium as well as for an Oceanarium wherein very large fish and marine animals will be housed. The Oceanarium is a project which the California Academy of Sciences hopes to develop in the near future. The remaining portions of the system, consisting of an underground pumping station behind the Ocean Beach Seawall and a pipeline to the Aquarium, are scheduled for early construction. The pipeline will be unique in that it will be constructed of polyvinyl chloride pipe. This material is one of the modern plastics and is chemically and physically inert in the presence of sea water, thus assuring an uncontaminated supply for the marine environments maintained for the many types of fish housed in the Aquarium.

WORK INCLUDED IN BUREAU OF ARCHITECTURE CONTRACTS

A substantial part of the activities of our mechanical and electrical engineers during the fiscal year consisted of design and consulting services to other agencies, notably the Bureau of Architecture.

Consulting and advisory services were rendered in connection with large projects at the Steinhart Aquarium, Civic Auditorium, Civic Center Plaza and the new Hall of Justice.

Plans and specifications were prepared for projects at the San Francisco General Hospital, Laguna Honda Home, Public Welfare Building, City Hall, City Hall Annex and various public schools.

An interesting example of school work was the design of fire sprinkler systems for several schools, totaling about $100,000 in cost, and the coordination of the design work of several consulting engineers in connection with a large-scale fire protection program undertaken by the San Francisco Unified School District as a result of an extensive survey of school properties conducted by the San Francisco Fire Department. A program of providing fire alarm system modifications in the schools was also initiated. Under this program, sprinkler alarms, heat detectors and auxiliary connections to the municipal fire alarm system are being installed. All of this work is conceived with the idea that the first consideration in the event of fire is to evacuate the children. Simultaneously, the Fire Department is to be called to control the fire. The systems proposed will act automatically to call the Fire Department in the event fire starts when a school building is not occupied.

STREET LIGHTING

Improvement of the street lighting system in San Francisco continued, financed by gasoline taxes. The net result of the gradual replacement of utility-owned street lights is to provide a better service for less money. The saving is due to the fact that the annual cost of City-owned street lights supplied with Hetch Hetchy power and maintained under a contract administered by the Public Utilities is less than the cost to the City of similar utility-owned street lights.

During the fiscal year contracts were let, in the amounts shown, for the following work:

Otis, McCoppin and Duboce Avenue South Van Ness Avenue and Mission Street	$ 28,942
Seventh Street, Bryant Street and Harriet Street	$ 16,546
Divisadero Street, Chestnut Street to Marina Boulevard	$ 20,266
Geary Expressway, Franklin Street to Masonic Avenue	$ 96,945
Glendale Avenue Stairway	$ 1,794
San Bruno Avenue, Rickard Street to Silver Avenue	$ 6,829
Diamond Heights Redevelopment Area	$119,031

The new street lighting system on Divisadero Street between Chestnut Street and Marina Boulevard is a good example of the type of lighting that should be provided on residential streets having bus lines or heavy pedestrian traffic. The annual cost of the 33 recently installed 175 watt mercury-vapor luminaires is slightly less than that of the 16 obsolete ornamental bracket incandescent luminaires they replace.

MARKET STREET PATH OF GOLD

Reallocation of funds and revision of plans in accordance with the decision to retain existing luminaires rather than design and construct new facilities delayed this contract, which is now expected to be advertised early in the 1961-62 fiscal year. A Service Order has been issued and patterns are to be prepared for use in manufacturing base castings as needed for the Path of Gold light poles.

Progress of contract awarded
during 1959-60 fiscal year

Jefferson Street, Leavenworth to Powell - Completed.

LANDSCAPING

Progress of contracts awarded
prior to fiscal year 1960-61

Upper Market Street - Portola Drive - Landscaping work between Dorchester Way and Clayton Avenue, consisting of the planting of 15 City owned lots scattered over two miles of Portola Drive was begun and completed in the fiscal year, at a contract cost of $36,103.

Market near Corbett Avenue - Landscaping in the vicinity of the viaduct at Corbett Avenue was completed at a contract cost of $13,321.

Progress of contracts awarded
during the fiscal year 1960-61

Upper Market Street - Portola Drive, Contract No. 2 - Plans and specifications were prepared and construction completed within the fiscal year, at a contract cost of $6,766. Work consisted of stabilizing a slide area on Portola Drive near Panorama Drive by means of compaction and ground cover.

Mansell Street, University Street to San Bruno Avenue - Plans and specifications were prepared and a contract awarded for $35,766 for center island landscaping with ground cover shrubs and trees on ten blocks of the widened Mansell Street, which serves Candlestick Park. Work was 7% complete at the end of the fiscal year.

Contracts scheduled to be awarded
during fiscal year 1961-62

Van Ness Avenue between McAllister and Grove Streets - Center island landscaping. Estimated contract cost: $13,000.

Sacramento Street, Presidio to Van Ness Avenue - Sidewalk tree planting. First project in the "Conservation Area" beautification program. Estimated contract cost: $12,000.

Geary Expressway, Masonic to Octavia Street - Center island landscaping on Geary Expressway. Estimated contract cost: $8,500.

City property at the intersection of Bridgeview Drive, Newhall Street and Revere Avenue - Fencing and landscaping. Continuing program of erosion control and public safety. Estimated contract cost: $3,750.

LANDSCAPING IRRIGATION WORK

Since the development of streetside planting as an integral part of the Department of Public Works services, provision of the necessary irrigation facilities for the planted areas has become an important part of our mechanical engineering activities. Projects including such work were constructed during the fiscal year on Mansell Street, Portola Drive and upper Market Street, in the total amount of $60,000. The work on Mansell Street is significant in that it was the first project on which automatic controllers were provided to initiate and control the irrigation cycles. This equipment eliminates the need for gardener supervision of irrigation, thus releasing labor for other horticultural work not susceptible to automation. It is expected that automatically controlled irrigation systems will be added to many other forthcoming and existing landscaping projects.

GARBAGE DISPOSAL

Since 1932, all garbage and refuse collected in San Francisco has been disposed of by the sanitary fill method in the tidal flats of San Francisco Bay. The method is a sanitary means of disposal, economical and profitable to all concerned, resulting in the reclamation of the tidelands. Two licensed scavenger companies make the collections which are delivered to the disposal site operated through the jointly financed Sanitary Fill Company. The City controls collection rates and enforces public health regulations.

Collection and Disposal

Unsegregated garbage and refuse is picked up in the residential districts once a week. In the downtown districts, where greater amounts of paper and garbage accumulate, general collections are made three times a week, and at large hotels, restaurants, etc., collections are made daily. The collectors salvage paper, rags, bottles and other revenue items enroute and at the sorting shed prior to the weighing of garbage designated for the fill. Although the refuse trucks have a capacity of about 20 cubic yards, the average load incorporated in the fill is approximately 18 cubic yards.

The scavenger companies collect garbage and refuse six days a week or about 312 days a year. The Sanitary Fill Company operates 5-1/2 days a week from 4:30 A.M. to 3:00 P.M. daily except Saturday when dumpings stopped at 11:00 A.M., since collections average only about 60% of the normal week day total.

Sanitary Fill Disposal Site

The disposal site is located just south of the San Francisco - San Mateo County Line on Southern Pacific Company property. It is bounded on the west by the Southern Pacific Company's Bayshore switching yards, on the east by the Bayshore State Freeway, and on the south by a dike across Candlestick Lagoon constructed just north of Guadalupe Canal. Earth materials used to cover the garbage are excavated from three areas: one located at the northwest end of the fill site, another northeast of the Sunset Scavenger shop yards and another on the southern slope of Candlestick Hill. There are now 270 acres of completed fill, of which approximately 35 acres are now being used for light industry.

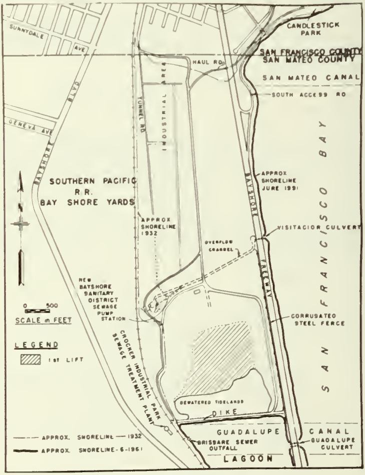


FIG. 6
GARBAGE DISPOSAL SITE

At the present the diked off area used for the disposal site has been almost entirely dewatered by pumping access water into Guadalupe Lagoon. Leakage through the dike has been completely eliminated by the addition of fill material at critical points to widen the dike and create a stronger seal on its southern flank.

A corrugated iron storage hut was built in 1960 on filled land at the disposal site to house the bulldozer used in the daily operation of the Sanitary Fill Company.

Fill and Cover Operations

The Sanitary Fill Company conducts the fill and cover operations through a subcontractor.

The fill and cover method of disposal is essentially a daily garbage fill with an earth seal creating separate cells within the fill. Sandy clay, which forms an excellent seal around the garbage, is available, as well as rock, which is necessary for maintaining the access roads during wet weather operations. The combined compaction of the garbage fill and the underlying Bay mud generally allows for many separate fills, each approximately 20 to 25 feet thick, one on top of the other.

Burning Banned

In accordance with the ban on open burning established through the efforts of the Air Pollution Control District, all burning has been eliminated.

Sewage Nuisances and Odors

Adequate cover on the daily fill area has reduced this source of odors on the Freeway to a minimum. Fumes from infrequent underground fires which occasionally break out onto the surface of the fill provide the most noticeable odors at present. When this occurs, everything possible is done to eliminate this nuisance quickly. The source of the nuisance is isolated by cutting out that portion of the fill where the fire exists, spreading it, wetting it down and then re-covering it with a fresh earth fill.

Fewer complaints have been received this year than in any other period of operation.

In June of 1961 construction of a pump station to be located at the northwest corner of the fill was begun in accordance with a previous agreement between the Bayshore Sanitary District and State agencies. This station will tie in the existing 8 ft. sewer at this location with the City of San Francisco's sewage system via a 21-inch C.M.P. gravity force main sewer. It will be able to handle a maximum of 3 m.g.d.

The pump station is being constructed with the intention of ending all raw sewage nuisances at the Sanitary Fill, which up to this time drained into a ditch via an 8 ft. outfall located north of the disposal site, and flowed into the bay.

TABLE III
GARBAGE COLLECTION AND DISPOSAL STATISTICS
CALENDAR YEARS 1959 AND 1960

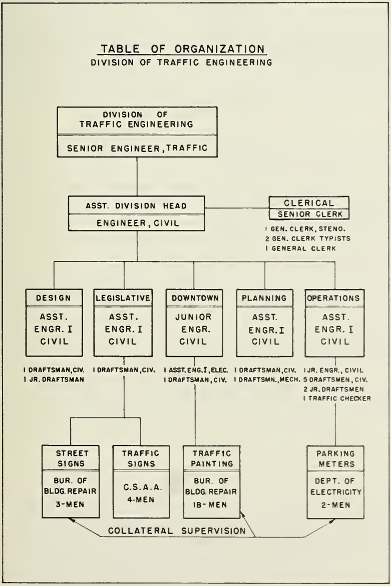
	1959	1960
FILL AND COVER EXPENSE		
Operations	$290,504.33	$312,335.80
Road Maintenance	13,608.00	3,827.60
Administration, Inspection Fees, etc.	78,259.08	79,302.77
Ditch, Dike, Fence, Etc. (Amortize 7 yrs.)	27,489.30	27,489.30
Total Expense	$409,860.71	$422,955.47
GARBAGE AND REFUSE HANDLED		
City of San Francisco, Tons	280,717.83	291,288.63
Average Quantity Per day, Tons (312 days)	903.	934.
Cost of Disposal Per Ton	$ 1.456	$ 1.454
COVER MATERIAL		
Quantity Used, Cu. Yd.	296,820	340,290.
Total Cost	$169,094.73	$174,619.73
Cost per Cu. Yd.	$ 0.57	0.513
Cover per Ton of Garbage and Refuse Cu. Yd.	1.055	1.166
Total Truck Loads of Garbage and Refuse	91,344.	97,573.
Average Weight per Load of Garbage, Tons	3.08	---
Average Weight per Load of Garbage and Refuse, Tons	---	2.98
Estimated Average Weight of Garbage per Cu. Yd., Pounds	342	---
Estimated Average Weight of Garbage and Refuse per Cu. Yd., Pounds	---	332
Total Income	$326,348.55	$408,173.32

DIVISION OF TRAFFIC ENGINEERING

The Division of Traffic Engineering collects, analyzes, and interpret traffic information and on the basis of such data recommends the im provement of traffic facilities.

ADMINISTRATION

The Table of Organization of the Division is shown below:



The list below shows the status of the major recommendations made under Plan C several years ago.

1. Transfer traffic functions from Police Department to Department of Public Works - COMPLETED.

2. Delegate authority from Board of Supervisors to Department of Public Works - DENIED.

3. Centralize all street and safety lighting in the Department of Public Works - NO PROGRESS.

4. Reorganize Bureau of Engineering by creating a Street Traffic Unit to be headed by a Deputy City Engineer - NO PROGRESS.

5. Create a position of Senior Engineer (Traffic) as head of Traffic Engineering - COMPLETED.

6. Centralize all street uses within the Division of Traffic Engineering - NO PROGRESS.

7. Create new position of Senior Engineer as head of Division of Highways - INCOMPLETE.

8. Create new Planning Section within Highway Section - INCOMPLETE.

9. Create by ordinance a Traffic Coordinating Committee composed of department heads - INCOMPLETE.

10. Create by ordinance a Public Traffic Appeals Board - NO PROGRESS - need questionable.

The staff increase for the Bureau of Engineering, recommended under Plan C, has not come about except for an increase of four persons.

INTERDEPARTMENTAL RELATIONS

There are four units within City government whose common interest in the problems of traffic and transportation require a close-knit cooperative effort: Department of Public Works, Department of City Planning, Police Department, and the Municipal Railway. In past years, this sorely needed cooperation was not always present; and, in order to provide it, an informal liaison group composed of secondary level staff members of the departments was formed several years ago. The

I.S.C.O.T.T. MEETING

organization, the Interdepartmental Staff Committee on Traffic and Transportation, ISCOTT for short, meets every other Friday at the Presidio Avenue conference room of the Municipal Railway. The representatives are the Traffic Engineer from the Department of Public Works; the Director of the Police Traffic Bureau, Police Department; the Superintendent of Traffic, Municipal Railway; and the Liaison Planner, Department of City Planning. Each representative is usually assisted by one or more aids. Mutual problems in traffic and transportation, including all items of proposed traffic legislation, are placed on the agenda and discussed at the meeting and an attempt is made to reach an agreement acceptable to all parties. This is achieved in practically all cases. The recommendations of the committee, while not binding, are almost always accepted by departmental heads.

While most items considered are normal street operating problems, questions involving freeways, Golden Gate Park traffic, and other special problems are cleared through ISCOTT by inviting members of other departments to meet with the basic four departments.

PARKING

Sixty-three formal parking checks, covering 1,527 stalls, were made for the Department of City Planning in connection with the ordinance requiring off-street parking for all new living units. Reports or studies were made for the San Francisco Parking Authority on the following projects:

1. Entrance requirements for Mechanical Garages.
2. Sutter-Stockton Garage.
3. Automatic equipment for City parking garages.
4. Parking facilities in the Western Addition Redevelopment Area.
5. Site locations for the Neighborhood District Parking Program.

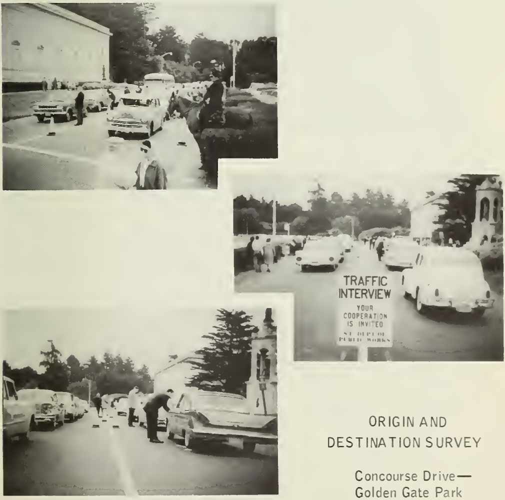
NEIGHBORHOOD DISTRICT PARKING LOT

The Site Location report for the Neighborhood Shopping District Parking Program (Report No. 2) was presented to the Parking Authority in May of 1961. Report No. 1, in October of 1959, contemplated serving the 1980 parking needs of the neighborhood shopping districts, but more extensive experience with the increased parking meter rates indicated that the additional revenues were not sufficient to support a bond issue aimed at constructing the entire 1980 program. As a result, a less ambitious project geared toward satisfying the needs of a 1970 horizon year was covered in Report No. 2. It recommended construction of 30 parking lots and 3 garages with a total capacity of 1,262 spaces in 18 neighborhood shopping districts. The capital cost of the program was estimated at $4,750,000. These proposals generated considerable controversy because of the need, in many cases, to take residential property in order to provide the parking facilities. Public hearings by the Parking Authority were started in the month of June and scheduled for completion after the end of the fiscal year.

TRAFFIC SURVEYS

The biennial peak-hour traffic flow map was issued by the Division in November 1960.

At the request of the Recreation and Park Department, a traffic survey to correct traffic congestion in the Concourse area of Golden Gate Park was made in August 1960. After preliminary traffic counts, an interview study of pedestrians, determining mode of travel and destination, was made in the Concourse, Conservatory, Stow Lake, and Bowling Green areas. Three Sundays later, an origin and destination interview study of motorists was taken. The entire survey, using Traffic Division and Recreation and Park personnel, was quite successful and ran into no problems.



ORIGIN AND
DESTINATION SURVEY

Concourse Drive—
Golden Gate Park

The findings of the study showed that the problem which occurred on Sunday afternoons centered in the Concourse area and was mainly the result of conflicts between automobiles and pedestrians, but that the suggested treatment of banning automobiles from the Park would be undesirable since the great majority of Park users arrive by automobile. Lack of parking was also a major problem.

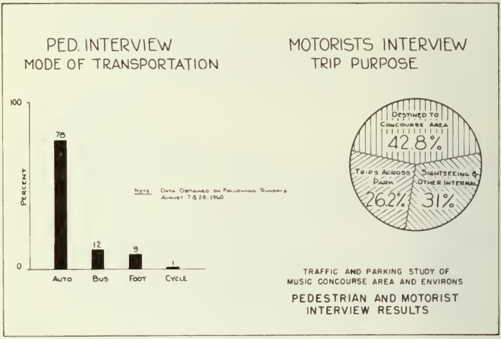


FIG. 7

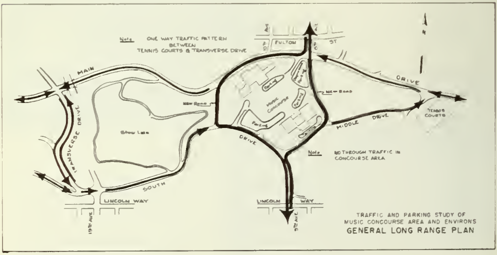


FIG. 8

The report recommended a one-way road pattern, provision of more parking, and elimination of vehicle-pedestrian conflicts by routing through-type and sightseeing-type trips around instead of through the Concourse area.

TRAFFIC PLANNING

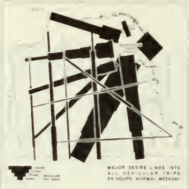
The most noteworthy traffic planning project of the past year was the traffic aspects of the joint report issued by the Department of City Planning and the Department of Public Works entitled, "Trafficways in San Francisco - A Reappraisal."

Courtesy S. F. Naval Shipyard

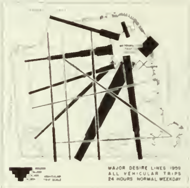
REMINGTON RAND UNIVAC FILE COMPUTER

The study, one of the most complex ever undertaken in the United States, involved forecasting the distribution of 1,920,000 trips in 1975 and then making traffic assignments to six different trafficways networks, each under four sets of conditions. The tremendous volume of data that had to be handled (38 million traffic assignments) necessitated the use of a high-speed electronic computer, in this case the Remington Rand UNIVAC File Computer, to analyze and assign traffic trips for the 24 different conditions.

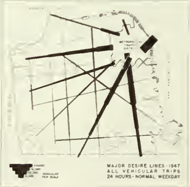
A computer program was originated for this study which utilized a new factor in traffic assignments, the second best route. This factor is based on the assumption that motorists, when faced with a choice of two freeway routes to their destination, will divide their choices as to route in proportion to time and distance factors.



MAJOR DESIRE LINES 1975
ALL VEHICULAR TRIPS
24 HOURS NORMAL WEEKDAY



MAJOR DESIRE LINES 1959
ALL VEHICULAR TRIPS
24 HOURS NORMAL WEEKDAY



MAJOR DESIRE LINES - 1947
ALL VEHICULAR TRIPS
24 HOURS - NORMAL WEEKDAY

Summaries of the travel times and distances necessary to serve the traffic under the previously mentioned conditions enabled the Division to evaluate and compare the economic benefit and accident reduction potential of the different networks.

SIGNALS AND CHANNELIZATION

Two contracts were let in the past fiscal year for the installation for traffic signals and channelization. The 18th isolated signal contract provided for the signalization of several high-accident intersections plus the modification of existing traffic signals at several locations.

A pedestrian actuated traffic signal and modification to existing channelization was included in the Fowler and Portola Drive signal contract.

TABLE IV

TRAFFIC, FACILITIES, IMPROVEMENTS, AND LEGISLATION

TRAFFIC SIGNS	Completed 1960-1961
Parking Signs Installed	582
Parking Signs Repaired or Changed	377
Parking Signs Removed	126
Other Signs Installed	733
Other Signs Repaired or Changed	602
Other Signs Removed	83
Stop Signs Installed	103
Stop Signs Repaired or Changed	307
Stop Signs Removed	37
Total	3,250

Approximate Cost 1960-1961............$40,000.00 estimated
Total Number in Place June 30, 1961........22,500 estimated

STREET NAME SIGNS	
Street Signs Repaired or Changed	1,003
Street Signs Installed	39
Total	1,042

Approximate Cost.......................$24,000.00 estimated

Total Number in Place June 30, 1960.......7,600 estimated

TABLE IV - continued

PARKING METERS

New or Amended Zones	0
New Installations	0
Removals	190 (1)
Installations	409 (1)
Relocations	157 (2)
Temporary Removals	215 (2)

Approximate Cost 1960-1961	$8,500
Total Number in Place June 30, 1961	12,206

The above table does not include the normal maintenance of parking meters performed by the Department of Electricity.

(1) - Removals and Installations due to the constant change of drop curbs and colored curbs and colored curb spaces in metered areas

(2) - Due to large building program of private and City interests.

TABLE V

TRAFFIC PAVEMENT PAINTING	Completed 1960-1961	Approximate Cost 1960-1961
Standard Striping, miles	675	$ 50,944
12-inch Stripes, miles	154	98,556
Pavement Words (Units) (Cost included in other items)	12,899	—
Bus Zones (Units)	1,955	11,436
Parking Stalls (Units - all types)	10,032	7,977
Total Cost		$168,914
New School Intersections	0	
Total School Intersections in Place June 30, 1961		839
Pounds of Reflective Beads Used		35,551

TABLE VI

SIGNALIZED INTERSECTIONS	Completed 1960-1961	Number in Place 6-30-61
Wiley Type Signals Replaced	0	1
3-Light Installations	-2	684
Net Decrease	-2	
Wiley Type Signals Existing		1
Total Signals		685
Equipped with Pedestrian Signals	0	173
Actuated Signals Added	0	169
CHANNELIZED INTERSECTIONS		
Concrete Islands	4	217
Raised Pavement Bars	3	33
Total	7	250
DIVIDED ROADWAYS		
Concrete Center Islands, Miles	.70	53.0

TABLE VII

LEGISLATION	Completed 1960-1961	Deleted 1960-1961	Number in Place 6/30/61
Stop Intersections	44	1	1,618
Yield Intersections	6	6	
Through Streets	0	0	93.5 miles
One-Way Streets	0.3	0	74.5 miles
Speed Zones (other than 25)	0	0	49.2 miles
Turn Restrictions (24 hours)	27	0	
Turn Restrictions (Peak Hours)	7	5	
Meter Block Faces	45	17	1,664
Towaway Block Faces	14	3	656*
Time Limit Block Faces	139	1	
Angle Parking Block Faces	11	2	

* Includes 99 Block Faces of Towaway for Candlestick.

DIVISION OF SURVEYS AND MAPPING

FIELD SURVEYS

A total of 275 field surveys, undertaken and completed by the six survey parties of the Division's Field Engineering Section, comprised the following:

Public Improvement Surveys for:

Public Assessments and Private Contracts	59 Surveys
Contracts Financed by City	196 Surveys

Site and Lot Location and Topographic Surveys for:

Bureau of Architecture	9 Surveys
Recreation and Park Department	5 Surveys
Board of Education	1 Survey
Real Estate Department	3 Surveys

Resurveys of Streets and Blocks in:

Redevelopment Project Areas (Western Addition Project A-1 and Golden Gateway Project E-1)	2 Surveys

Survey fees received by the City for Public Assessment and Private Contracts totaled $15,460.

EXTENT OF FIELD SURVEYS

The aggregate length of field surveys completed totaled 51.91 miles, in addition to which 38.59 acres to topographic surveys were completed. The aggregate length, which was the sum of the various construction project lengths except where not applicable, comprised the following:

Cross sections for street, structure, sewer and drainage design	2.97 Miles
Line and grade for construction of:	
Sewer and drainage systems	3.54 Miles
Street grading	1.36 Miles
Pavement and curbs	2.27 Miles

Line, grade and cross sections for reconstruction of existing:	
Pavements	3.15 Miles
Pavements including track removal	None
Curbs and gutters	0.04 Miles
Post-construction examination of:	
Sewer and drainage systems	1.60 Miles
Street grading	0.88 Miles
Pavement and curbs	2.15 Miles
Subsidence area	8.87 Miles
Slide area	1.79 Miles
Block, site and lot:	
Surveys (boundary lengths)	1.85 Miles
Resurveys (frontage lengths)	6.22 Miles
Reference points (frontage lengths)	0.35 Miles
Monument lines checked	3.82 Miles
Grade studies	0.81 Miles
Miscellaneous other surveys	10.24 Miles

MONUMENTS

In addition to the aforementioned checking of existing monument lines, 93 survey monuments were reset and referenced, and 25 monuments examined for repair and, if necessary, repaired.

PRECISE LEVEL SURVEYS

Precise level bench marks established, and elevations redetermined on existing bench marks, totaled 674, requiring the running of approximately 71.18 miles of precise levels in addition to the aforementioned survey mileage.

REDEVELOPMENT PROJECT AREA OFFICIAL MAPS

For the first time in more than 30 years an Official Map, that of the Western Addition Redevelopment Project Area A-1, was ordered by the Board of Supervisors under the State Subdivision Map Act, completed and recorded. This map, which officially superseded all other prior recorded maps of the area, included the delineation of a new monument system for determining the locations of all street lines shown thereon.

A Record of Survey map of the Golden Gateway Redevelopment Project Area E-1, as a preliminary to an Official Map of that area, was being prepared and scheduled to be filed in September or October 1961.

SUBDIVISION MAPPING

Subdivision development in San Francisco almost has been completed because so few large land areas in the County remain unimproved. Smaller areas, however, continue to be subdivided principally by Record of Survey Maps in accordance with the Subdivision Map Act, but areas such as this also are becoming scarce. The disposition of maps relating to subdivisions follows:

- Tentative Subdivision Maps examined and approved
  - Miraloma Park Subdivision No. 11
  - Southern Hills Subdivision No. 2A
  - Southern Hills Subdivision No. 2B
  - Resubdivision of Portion Block 7065

- Tentative Subdivision Map examined and approved but subsequently withdrawn:
  - Sheldon Terrace Subdivision

- Tentative Subdivision Map examined and disapproved
  - Resubdivision, Lot 17, Block 2121A

- Final Subdivision Maps examined, approved and recorded
  - Southern Hills Subdivision No. 1
  - Forest Hill Heights
  - Miraloma Park Subdivision No. 11
  - Southern Hills Subdivision No. 2A

- Record of Survey Maps examined and recorded
  - Western Addition Redevelopment Project, Area A-1
  - Portion of Assessor's Block 2629A
  - University Mound Survey, Block 6054
  - Assessor's Block 2035A
  - Portion of Block 11, San Miguel City
  - Portion Block 2634, Lawton Heights
  - Portion of Assessor Block 3000B
  - Marine Corps Supply Forwarding Annex (Islais Creek)

STREET DEDICATION MAPS APPROVED AND RECORDED

Widening of Twin Peaks Boulevard between Clayton Street and Bigler Avenue.
Extension of Conkling Street from its Northerly Terminus to Waterville Street.
Widening of the Intersection of Sutter Street and Stockton Street.
Widening of Laguna Honda Boulevard between Dewey Boulevard and Clarendon Avenue.
Widening of Portola Drive between Twin Peaks Boulevard and Clipper Street.
Widening of the Intersection of Holloway Avenue and Tapia Drive.
Realignment of a Portion of Franconia Street Southerly from Mayflower Street.
Widening of Webster Street from Post Street to Golden Gate Avenue.

OTHER MAPS APPROVED AND RECORDED

Official Map of the Western Addition Redevelopment Project, Area A-1
Map Showing the Amendment of the Monument Location at Golding Lane as shown on Map of Perego Heights.
Map Showing 37 Parcels of Land to be deeded to the City and County of San Francisco for Street Purposes in Diamond Heights Redevelopment Project, Area B-1.

SURVEY PLATS PREPARED

Boring and Utility Locations - Hayes Street, Polk Street to Larkin Street.
Fire House Engine No. 22, Irving Street at Sixteenth Avenue - Boundary and Topography.
Fire House Engine No. 23, Olympia Way East of Clarendon Avenue - Boundary and Topography.
Fire Department Training Center Extension, Folsom and Nineteenth Street - Boundary and Topography.
Lafayette Park - Topography.
Emerson School Addition - Boundary and Topography.
Civic Auditorium - Boundary
New Central Police Station - Boundary and Topography.

STREET VACATIONS APPROVED

Mendosa Avenue	10th Avenue to its W'ly Terminus
Arch Street	Sargent St. to 375 ft. N'ly
Mangels Avenue	S'ly 12.5 ft., Detroit St. to Edna St.
Freeman Court	44.5 ft. at its S'ly Terminus
Wawona Street	Triangular Portion at 25th Ave.

STREET VACATIONS APPROVED - Continued

Allison Street	75 ft. at its S'ly Terminus and 10 ft. on its W'ly Side
Bellevue Avenue	Watt Ave. to 129 ft. W'ly and 18 ft. on its northerly side.
Watt Avenue	E'ly 10 ft., Hanover St. to 248 ft. S'ly
Lyon Street	Bay St. to Jefferson St.
North Point Street	Baker St. to Lyon St.
Beach Street	Baker St. to Lyon St.
Grand View Avenue	Triangular Portion S'ly from 23rd St.
Detroit Street	Rectangular Portion at Monterey Blvd.
Fountain Street	25 ft. at its S'ly Terminus
Stevenson Street	47 ft. at its S'ly Terminus S'ly from 7th St.
Twin Peaks Boulevard	S'ly 25 ft., Crown Terr. to Graystone Terr.
Stevens Alley	At Broadway and Sansome St.
Broderick Street	O'Farrell St. to Geary Blvd.
Buchanan Street	Willow St. to O'Farrell St.
Ellis Street	Hollis St. to 357 ft. west of Laguna St.
Olive Street	Octavia St. to Buchanan St.
Octavia Street	Eddy St. to Post St.
Willow Street	Octavia St. to Laguna St.
Myrtle Street	Franklin St. to Laguna St.
Cedar Street	Octavia St. to Laguna St.
Endicott Park	198 ft. at its W'ly terminus
Elton Lane	N'ly from O'Farrell St., W'ly from Steiner St.

CHANGES IN OFFICIAL WIDTH OF SIDEWALKS APPROVED

Sutter Street	Stockton St. to 107.5 ft. W'ly from Grant Ave.
Stockton Street	Sutter St. to S'ly Portal, Stockton St. Tunnel.
Evelyn Way	Portola Drive to Juanita Way.
Hotaling Place	Washington St. to Jackson St.
Minna Street	Fourth St. to Fifth St.

CHANGES IN OFFICIAL GRADES APPROVED

Bright Street	Alemany Blvd. to Palmetto Ave.
Mangels Avenue	Detroit St. to 470 ft. E'ly from Foerster St.
Cambridge Street	Wayland St. to 300 ft. S'ly.
Yale Street	Wayland St. to 300 ft. S'ly.
Boutwell Street	Helena St. to 20 ft. N'ly.

OTHER OFFICE WORK

More than seventy-seven miscellaneous drawings were prepared in connection with property acquisition and disposition, street openings, widenings and vacations, and easement acquisitions and abandonments.

Thirteen reports regarding City interest in actions to quiet title were made to the City Attorney's office.

One hundred-thirty descriptions for deeds to and from the City involving the Department of Public Works were checked.

Four appeals from decisions of the City Planning Commission were checked to determine whether the signatures thereon represented at least twenty percent of the property owners within a radius of 300 feet of the property involved so as to qualify the appeals for consideration by the Board of Supervisors.

DIVISION OF CONSTRUCTION

GENERAL

The Construction Division controls all construction contracts for the City Engineer with an Inspection Section and a Testing Section. The construction rate has been steady so that a permanent, experienced Inspection Section has developed. The Testing Section consistent with the City Charter has become the central testing agency for the City. Testing for the Recreation and Park projects have been taken over and work for other City divisions has increased. An extensive soils testing laboratory has been added during the past year. Considerable research and trouble-shooting is done by the Testing Division.

CONSTRUCTION

The construction is divided between sewers and street reconstruction plus some street resurfacing, assessment work and special projects. The major sewer work has continued to be on the collection system leading to the treatment plants. Improvement of the existing sewer system is expected to overtake the collection system work in a few years, however. The major street improvement has been the Geary Expressway leading from the business district fringe to the large westerly residential area. The Diamond Heights Project, a large residential land redevelopment is well under way.

NEW EQUIPMENT

New equipment purchased this year includes a Speedy Moisture Meter, a Schmidt Concrete Hammer, and soil compaction equipment. These tools will help speed up test results and materially aid in the enforcement of job specifications.

A universal testing machine, an asphalt centrifuge extractor, an oven, and a platform balance have been authorized for purchase. This equipment will replace existing obsolete inadequate equipment.

The laboratory has designed light weight concrete and other mixes principally for the Bureau of Architecture. Extensive research on construction problems has been done. A typical problem was the nonuniformity of light aggregate. The solution was to weigh dry batches, add the necessary water and check the yield.

CONCRETE

	1960-61	
Bureau of Architecture	725	
Public Utilities Commission	30	
Bureau of Engineering	460	
		1215

CHEMICAL & PHYSICAL TESTS

Public Utilities Commission	25	
Department of Public Works (Maint.)	20	
Purchaser of Supplies	225	
Fire Department	120	
Bureau of Architecture	400	
Bureau of Engineering	220	
		1010

ASPHALT & COAL TAR TESTS

Public Utilities Commission	15	
Department of Public Works	30	
Bureau of Engineering	140	
		185
TOTAL		2410

ADMINISTRATION OF THE BUREAU

During the fiscal year 1960-1961, a new organization chart was drawn to reflect the changes in the Bureau of Engineering. One of the many changes was that of assigning an Engineer to head the Division of Streets and Highways, thereby permitting the Assistant City Engineer to devote more time to assist the City Engineer in the administration of the Bureau's activities.

On February 14, 1961, a Liaison section was created to handle close coordination of the various projects, reports, conferences, meetings, and public hearings relating to the Freeway system in San Francisco, and to assist the City Engineer and Assistant City Engineer in coordinating activities among the various Divisions of the Bureau.

SUPERVISORY PERSONNEL
AS OF JUNE 30, 1961

DIVISION AND SECTION	PERSON IN CHARGE
LIAISON ENGINEER	H. H. Beneke, Asst. Engineer
CONTRACT ADMINISTRATION	F. Giusto, Asst. Engineer
STREETS AND HIGHWAYS	W. C. Ewing, Engineer
Street Improvement Section	H. G. Louie, Engineer
Highway Section	F. C. Chan, Asst. Engineer
Street Reconstruction Section	E. J. Sierra, Engineer
RECREATION AND PARK ENGINEERING	G. Harman, Supervising Engineer
Office Engineering	W. Person, Asst. Engineer
Field Engineering	P. Phillips, Asst. Engineer
DESIGN	G. Galli, Acting Senior Engineer
Structural Section	R. G. Lee, Engineer
Sewer Section	R. F. Lauenstein, Engineer
Sanitary and Special Projects Section	A. O. Friedland, Engineer
Mechanical Section	D. H. Matlock, Engineer
Electrical Section	A. E. Tanner, Engineer
Specifications and Estimating Section	J. Lee, Asst. Engineer
Utilities Section	W. R. Daly, Senior Draftsman
Administrative Section	Vacant
SURVEYS AND MAPPING	S. C. Gerughty, Engineer
Administration and Records Section	T. Vollenweider, Asst. Engineer
Office Engineering Section	G. Q. Woo, Asst. Engineer
Field Surveys Section	G. Miller, Asst. Engineer

CONSTRUCTION	J. D. Roberts, Senior Engineer
Inspection Section	Vacant
Testing Section	P. Bernard, Engineering Chemist
TRAFFIC ENGINEERING	R. T. Shoaf, Senior Traffic Engineer
Administration Section	W. Marconi, Asst. Engineer
Design Section	B. Johnson, Asst. Engineer
Legislative Section	C. M. Lang, Asst. Engineer
Downtown Section	R. Evans, Junior Engineer
Planning Section	G. Hansen, Junior Engineer
Operations Section	N. O'Boyle, Asst. Engineer
OFFICE MANAGEMENT	F. R. Nichols, Head Clerk

PERSONNEL AT BEGINNING AND END OF FISCAL YEAR:

DIVISION	July 1, 1960	June 30,1961	Change
Administration	5	6	+ 1
Streets and Highways	32	33	+ 1
Recreation and Park Engineering	—	15	+ 15 (1)
Design	97	95	-2
Surveys and Mapping	35	35	—
Construction	21	27	+ 6
Traffic Engineering	27	28	+ 1
Office Management	13	15	+ 2
Total	230	254	+ 24

(1) Transferred to Public Works Feb. 9, 1961.

RETIREMENTS AND DEATHS

During the past year the following employee was retired from service and recognition is given to his faithful service in the organization:-

George A. Phile	Disability Retirement	Oct. 1, 1960	Draftsman	14 years

IN MEMORIUM

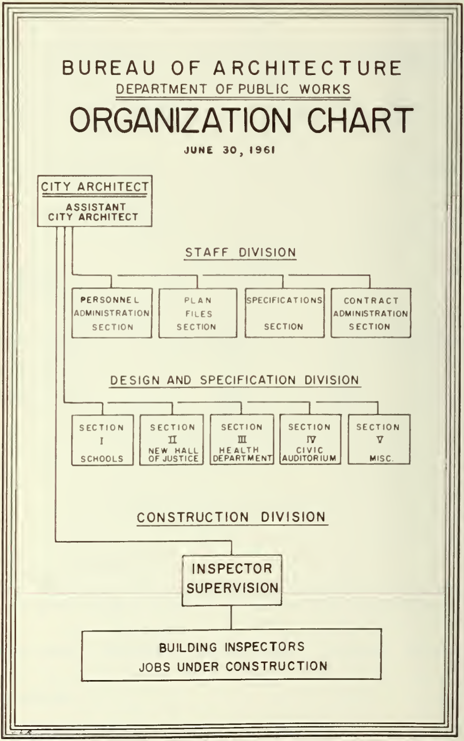
Earl W. Sheble	Nov. 24, 1960	Head Clerk	31 years
Michael Porrazzo	Dec. 31, 1960	Sr. Draftsman	22 years

PAYROLL:

The following tabulation shows the number of employees and total payroll charge to General and Project Funds:

SOURCE OF PAYROLL FUNDS	Employees 1960-61	Payroll 1960-61
General Fund		
Budget Payroll	7*	$ 26,903.00
	58	489,596.00
Project Funds - (gas tax, bond, etc.)		
Interdepartmental	8*	25,193.00
	153	1,118,038.00
Traffic Engineering	28	197,907.00
TOTAL	254	$1,857,637.00

*Employees transferred from Recreation and Park Engineering Feb. 1, 1961 - Jun. 30, 1961.


BUREAU OF ARCHITECTURE
DEPARTMENT OF PUBLIC WORKS
ORGANIZATION CHART
JUNE 30, 1961
CITY ARCHITECT
ASSISTANT CITY ARCHITECT
STAFF DIVISION
PERSONNEL ADMINISTRATION SECTION
PLAN FILES SECTION
SPECIFICATIONS SECTION
CONTRACT ADMINISTRATION SECTION
DESIGN AND SPECIFICATION DIVISION
SECTION I SCHOOLS
SECTION II NEW HALL OF JUSTICE
SECTION III HEALTH DEPARTMENT
SECTION IV CIVIC AUDITORIUM
SECTION V MISC.
CONSTRUCTION DIVISION
INSPECTOR SUPERVISION
BUILDING INSPECTORS
JOBS UNDER CONSTRUCTION

BUREAU OF ARCHITECTURE

CHAS. W. GRIFFITH, CITY ARCHITECT

FUNCTIONS

The Bureau of Architecture is charged with the responsibility for the design and construction of new City buildings, and the modernization, remodeling, and such maintenance projects on existing City buildings as may require plans and specifications or which may exceed $2,000.00 in cost. The activities of the Bureau are divided into two separate but related general functions: (1) the preparation of drawings, specifications, and estimates; and (2) the supervision of construction.

Once the need for a building project is established, the Bureau assists the Department which will occupy the structure in the preparation of a basic program. This program consists of general information relative to the functions to be performed in the building, the number and type of employee who will be housed in the building, the public to be served, and related data. The Bureau then prepares preliminary drawings. specifications, and estimates of costs, and when funds are available, the working drawings, specifications, and final estimates. The bid forms are then prepared, and the project advertised. After bids are received they are carefully analyzed and recommendations are prepared concerning award of contract. After award of contract, Bureau personnel inspect the work under progress, certifying its completion in conformance with the contract, together with progress and final contract payments.

The amount of work in the Bureau has been steadily increasing, and as of July 1, 1961 was as follows:

	No. of Jobs	Amount
1. Preliminary Design Stage	2	$12,700,000.00
2. Working Drawing Stage	84	10,423,000.00
3. Under construction	74	32,568,000.00
4. Contracts completed (1960-61)	109	8,261,040.00
Total	269	$63,952,040.00

In addition, preliminary data has been prepared for four Bond Issues in total amount of $34,034,000.00.

ORGANIZATION

The Organization Chart indicates in very brief manner the breakdown of divisions which have been found to be efficient in processing the Bureau's work. The City Architect is the Bureau Head and is assisted in discharging his responsibilities by the Assistant City Architect. The organization of the Bureau is broken down into three separate divisions: Staff, Design, and Construction. The responsibilities of these Divisions are further defined as follows:

STAFF DIVISION

Section I - Personnel

This section is responsible for fiscal arrangements and work orders for both architectural and related engineering services.

Section II - Plan Files

This section is responsible for requisitions and procurement of blueprints, assembly of blueprints, specifications and bid forms, the filing of tracings, blueprints and specifications, and related work.

Section III - Specifications

This section is responsible for specification standards, the coordination and accuracy of the general conditions affecting the contract, the mechanics of editing, checking, mimeographing and assembling of the specifications.

Section IV - Contract Administration

This section is responsible for the coordination of jobs under construction. All correspondence, shop drawings, reports, etc., relating to jobs under construction are cleared through this section.

DESIGN AND SPECIFICATION DIVISION

The responsibility for processing the various jobs from initial inception to the completion of the final drawings, specifications and estimates is divided into five separate sections. Each of these sections is headed by an architect who not only maintains formal and informal relationships with the client agency but also supervises the personnel assigned to him for the preparation of the drawings and specifications. The five sections are:

Section I - School

Section II - Hall of Justice

Section III - Health Department

Section IV - Civic Auditorium

Section V - Miscellaneous

CONSTRUCTION DIVISION

This Division supervises and inspects all work under construction. The responsibilities of the Construction Division include progress and validity of the contract work, contract payments and certification of completion of the contract. The number of contracts under construction is 74 and the amount is $32,568,000.00.

The Construction Division is headed by an architect and there are two Supervising Construction Supervisors who supervise the building inspectors who are assigned directly to the construction jobs.

A secondar responsibility of the Construction Division is concerned with jobs completed throughout the previous fiscal year. The amount of work which will be done on the completed jobs is indeterminate, but in certain cases will be considerable. A thorough inspection must be made at the end of the year bonded guarantee period one year after the acceptance of the job, and any defect found which is the result of faulty materials or workmanship must be corrected by the contractor. A situation often developes in which much correspondence and many conferences are involved when such defective work is discovered, and considerable time is always required to effect a proper disposition of such cases.

BOND ISSUES

The greatest amount of the Bureau's work consists of design and construction of buildings for which bonds have been voted. The bond issue work being completed at present is as follows:

I. 1952 Fire Department Bond Issue $4,750,000.00

Two new firehouses, one for Engine Co. No. 14, Oak and Franklin Street, and one for Engine Co. No. 15, 2150 California Street, were completed this year. The total construction cost was $576,000. The plans and specifications were completed for one new firehouse for Engine Co. No. 22, 16th Avenue and Irving Street for which bids are to be received in September. The estimated cost of this firehouse is $200,000. The above work will complete the bond issue for all practical purposes, and the record indicates that the following has been accomplished:

A. Fourteen new firehouses at a construction cost of $3,867,000 have been built and one additional new firehouse will be completed at a cost of $200,000.

B. Eleven firehouses were reconstructed at a cost of $678,937.00.

C. In addition, a training facility at 18th and Folsom Streets, in the amount of $58,808.00 was under construction and a new firehouse for Engine Co. No. 23, Olympia and Clarendon Avenue, was in planning stage, estimated cost $275,000. These latter two jobs were financed by budget appropriations.

II. 1954 Laguna Honda Home Bond Issue $5,475,000.00

The extensive work of this bond issue is now completed. In total, twenty projects were completed in amount of $5,175,000 and $300,000 of equipment was obtained. In addition, approximately $2,200,000 of deferred maintenance work was completed, and one such job in the amount of $229,909 is now under construction.

III. 1954 San Francisco Hospital Bond Issue $5,830,000.00

The design work of this Bond Issue is now completed and the last two major bond projects are under construction. The status of the work and the deferred maintenance appropriations as of July 1961 are as follows:

A. Jobs completed (70%)

Forty projects at construction cost of	$4,588,202.00

B. Jobs under construction (30%)

Three projects at a construction cost of	$1,641,752.00

These projects are scheduled for completion in the fall of 1961 and, for all practical purposes, will complete the Bond Issue work.

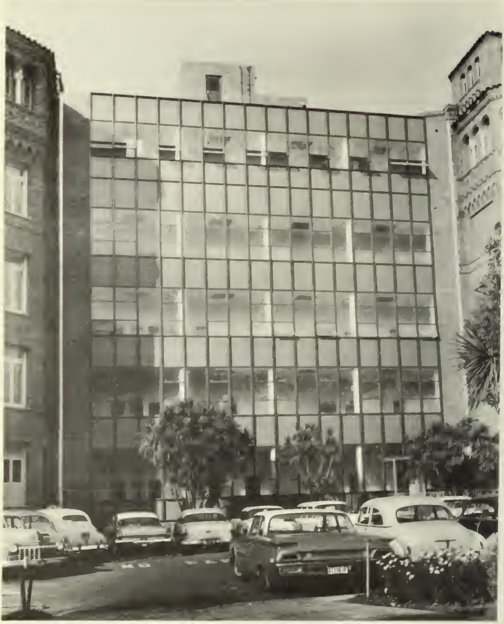
C. The balance of the bond funds have been appropriated for the construction of a new Pathological Building, a project estimated to cost $851,000, which is now in preliminary design stage.

The total work authorized at the Hospital included the $5,830,000 of which $500,000 was used for equipment, and approximately $2,200,000 of deferred maintenance appropriation. The forty-three projects which have or will be completed have improved conditions materially but some of the work originally intended cannot now be completed because of lack of funds. The two major projects which will not be completed are Rehabilitation of Ward Buildings 20 and 30 at a total estimated cost of $1,100,000. However these projects are not being processed because Public Health now wants to explore the possibility of obtaining a complete new hospital. Studies have not been made for a complete new hospital nor has a program for a new hospital been developed, and this work must be completed prior to preparing an accurate estimate for the new hospital. The cost of preparing the necessary data will be included in the 1962-1963 budget.

IV. 1956 School Bond Issue	$27,000,000.00

All projects of this bond issue were either completed or under construction as of July 1, 1961, and the status was as follows:

A. Construction Completed (24%)



CONNECTING CORRIDORS
WARD BUILDINGS 30 AND 40
SAN FRANCISCO HOSPITAL

Project No.	Name	Amount
1. 135	Starr King School	$ 285,200.00
2. 105	John O'Connell H.S.	266,046.00
3. 119	Balboa H.S.	26,400.00
4. 121	H. Mann Jr. H.S.	88,712.00
5. 125	Silver Ave. Jr. H.S.	1,035,542.00
6. 124	G. Washington H.S.	107,612.00
7. 150	Polytechnic H.S. (Alterations)	35,374.00
8. 150	Polytechnic H.S. (Kitchen)	96,557.00
9. 150	Balboa H.S. (Athletic Field)	109,670.00
10. 130	Clarendon School (Grading)	4,380.00
11. 150	H. Mann Jr. H.S. (Alterations)	73,510.00
12. 150	H. Mann Jr. H.S. (Library)	46,697.00
13. 150	Roosevelt Jr. H.S. (Playyard)	50,478.00
14. 113	S.E. High School (Grading)	84,444.00
15. 123	Portola Jr. H.S.	463,500.00
16. 132	Longfellow School	844,000.00
17. 120	Francisco Jr. H.S.	578,000.00
18. 101	City College	2,245,600.00
19. 119	Lincoln H.S. (Athletic Field)	327,200.00
	Subtotal	$ 6,768,922.00
	B. Under Construction (50%)	
20. 122	Denman Jr. H.S.	$ 455,183.00
21. 114	S.W. High School	4,081,150.00
22. 130	Clarendon School	848,849.00
23. 113	S.E. High School	4,324,000.00
24. 132	J. Ortega School	608,690.00
25. 131	Golden Gate School	575,000.00
26. 120	Francisco Jr. H.S. (Yard)	50,000.00
27. (none)	Reconstruction	3,000,000.00
	Subtotal	$13,942,872.00
	C. Equipment (4%)	$ 1,500,000.00
	D. Miscellaneous costs and Contingencies (14%)	$ 3,570,896.00
	E. Unallocated (8%)	$ 1,217,310.00
	Total	$27,000,000.00

SOUTHEAST SENIOR HIGH SCHOOL

From the above report is is obvious that excellent progress has been made on this Bond issue and that all bond jobs will be completed within the money available. Actually, savings were made in Bond projects during the past three fiscal years since several projects were awarded for sums less than the estimated construction costs.

In addition to the Bond projects, the Jefferson School, destroyed by fire, was in construction stage at an estimated cost of $707,750. This

JEFFERSON ELEMENTARY SCHOOL

school is scheduled for completion and occupancy in February 1962, and is being financed from District funds and the fire loss insurance settlement. Another project, also to be financed from District funds, is the remodeling of the Administration Building, estimated to cost $1,200,000, for which a preliminary estimate has been prepared.

V. 1956 Hall of Justice Bond Issue $19,475,000.00

Construction of the foundations of this structure at a cost of $931,967.44, was completed in January 1959, and the principal building contracts, in total amount of $14,004,888, were certified immediately thereafter. One additional contract, the Service Station in total amount of $164,119, was constructed this year, and the final construction contract, the Parking Lot, construction cost $100,000, was completed in June 1961. All work will be completed so that the building will be occupied in September 1961. The Bureau also prepared lists for the complete equipping of the building during this fascal year in total amount of $734,127, and supervised the installation of this equipment. The status of the Bond Issue as of July 1, 1961 was therefore as follows:

1. Construction contracts completed (3)		$ 1,196,086	(6%)
2. Under construction*			
(a) General Construction	$13,980,381		
(b) Elevators	486,091		
(c) Landscaping	30,780		
Subtotal		$14,497,252	(74%)
*Work 95% completed July 1, 1961			
3. Equipment		$ 764,000	(4%)
4. Miscellaneous and Contingencies		$ 2,337,662	(12%)
5. Unallocated		$ 680,000	(4%)
Total		$19,475,000	(100%)

General Description of Building

Seven-story and ground floor concrete structure with marble facing, and with an adjacent one-story and roof deck parking structure, bounded by Seventh, Harriet, Bryant, and Harrison Streets.

Total Gross Sq. Ft. Area	571,145 sq. ft.
Parking (2 decks)	131,452 sq. ft.
Total Cubage	9,650,000 cu. ft.
Public Parking	131,000 sq. ft.

The building will provide space for the following City and County of San Francisco Departments and related facilities:

Roof	Helioport, Microwave Tower
Seventh Floor	County Jail
Sixth Floor	City Jail
Fifth Floor	Police Department
Fourth Floor	Police Department
Third Floor	Superior Criminal Courts, District Attorney, and allied Departments
Second Floor	Munipal Criminal Courts, Adult Probation, and allied Departments
First Floor	Municipal Traffic Courts, Traffic Fines Bureau, Police Traffic Bureau, Coroner's Department in adjacent one-story wing
Ground Floor	Police Department Locker Rooms, Property Storage, Maintenance Areas, Boiler Room, Cafeteria, etc.

MAIN LOBBY OF NEW HALL OF JUSTICE

Occupancy of Building

Occupancy of the new Hall of Justice is scheduled for September 1961, and will be as follows:

Occupants of Building	Cost(%)	Area (%)	Sq.Ft.Area
Police Department - City Prison	58.00	63.60	443,397
Criminal Courts (4 Municipal)	9.20	5.20	38,000
Criminal Courts (4 Superior)	6.50	5.30	38,500
Criminal Courts (3 Traffic)	6.70	7.30	54,000
District Attorney	4.10	4.30	30,500
Adult Probation	3.70	3.80	22,000
Public Defender	.85	.90	6,200
County Clerk (Criminal Division)	.45	.50	5,500
Coroner	2.80	2.60	18,500
Sheriff's Detention Jails	7.70	6.50	46,000
Totals	100.00	100.00	702,597

MUNICIPAL TRAFFIC COURT
NEW HALL OF JUSTICE

VI. 1958 Steinhart Aquarium Bond Issue $1,575,000.00

The work of this Bond Issue was divided into two parts, a new salt water pipeline from the beach to the Aquarium, and the rehabilitation of the Aquarium. Bids were received on the rehabilitation work on May 4, 1960 and reappropriation of funds was found to be necessary prior to award of contract. The final financial breakdown of the Bond Issue funds is as follows:

A. New Salt Water Pipeline		
1. Construction	$135,000.00	
2. Engineering	20,500.00	
3. Consulting Engineer	9,200.00	
4. Inspection	6,000.00	
5. Unallocated	1,100.00	
Subtotal		$ 171,800.00
B. Rehabilitation of Aquarium		
1. Construction	$1,227,711.00	
2. Inspection	12,900.00	
3. Preliminary Expenses	19,245.07	
4. Architects Fees	104,495.00	
5. Contingent Fund	33,669.22	
6. Miscellaneous Costs	5,000.00	
7. Unallocated	179.71	
Subtotal		$1,403,200.00
Total		$1,575,000.00

It should be noted that some of the work originally intended to be completed in the Bond Issue will not now be a part of the work. The items omitted are not as urgent as the included work, but will probably have to be budgeted during the next few years.

The complete time schedule for the rehabilitation of the Aquarium is as follows:

1. Bonds voted	June 3, 1958
2. Funds appropriated	October 22, 1958
3. Architects appointed	January 15, 1959
4. Plans and specifications completed	February 15, 1960
5. Bids received	May 4, 1960
6. Reappropriation approved	August 26, 1960
7. Rehabilitation work to start	October 3, 1960
8. Phase I completion (11 months)	January 1, 1962
9. Phase II completion (7 months)	July 1, 1962

Since the installation of the new salt water pipeline is a much smaller job, it can be finished long before the rehabilitation of the Aquarium.

VII. 1959 Civic Auditorium Bond Issue $7,575,000.00

The Bond Issue was approved by the Finance Committee of the Board of Supervisors in June 1959, and upon the recommendation of the Mayor's Bond Screening Committee the amount was reduced by $200,000.00 which had been previously approved for restorative work at the Auditorium in the 1959-1960 Budget. The amount of this bond issue, approved on the November 3, 1959 ballot, is therefore $7,575,000.

The Civic Auditorium, which is San Francisco's principal convention facility, is obsolescent. Built in 1914, it has not been modernized and maintenance has not been adequate. While other cities such as Detroit, Los Angeles, Miami, Portland and Las Vegas have completed or are building new convention buildings, San Francisco does not have the space to do likewise. It is also impractical since the location of a new convention building would have to be in the same location as the Civic Auditorium, and the wrecking of the existing building and the building of a new structure would take at least two years, during which time the convention business, for all practical purposes, would be lost. It is therefore essential that the Civic Auditorium which is basically sound both in plan and construction, be completely rehabilitated and modernized so that it can successfully compete with new buildings in other cities.

The "Survey of Convention Facilities Needs in San Francisco" prepared by the Industrial Planning Associates, established requirements which must be met in the modernization and rehabilitation work as a part of an organized program to increase San Francisco's share of the convention business from $30,000,000.00 in 1957 to $72,000,000.00 in 1980. These requirements are as follows:

1. Rehabilitation of the Main Arena, Polk and Larkin Halls, to serve in the dual capacity of large meeting rooms and exhibit space.

2. Provide 60 small meeting rooms, seating from 40 to 250.

3. Improve the vertical transportation.

4. Replace the obsolete electrical, plumbing, and mechanical systems, provide modern heating, lighting, plumbing and air conditioning systems.

The Bureau's report, revised April 15, 1959, describes in detail the work which will be done to achieve these ends. An estimate of cost and an interruptible construction schedule which will provide for completion of the work during periods of non-use of the Auditorium between scheduled conventions and special events. The total estimated cost of this Bond Issue was $7,575,000. The basic requirements and provisions made to provide for them are listed belows:

1. The restoration of the Main Arena and Polk and Larkin Halls to serve as both large theatre-type meeting rooms and as exhibit space. While at present these rooms do serve in this dual capacity, their finishes are shabby and obsolete. The ceiling of the original arena is worn out and has been removed, and awning-type ceiling installed as a temporary expedient. The acoustics in these three big meeting rooms are poor. The estimate provides for all of the above corrective work plus new seats for Polk and Larkin Halls.

2. Sixty meeting rooms seating from 40 to 250, a total of approximately 5,000. The Auditorium now has 16 meeting rooms, seating from 30 to 150. The estimates provides 64 meeting rooms seating a total of about 5,200.

3. The improvement of vertical transportation throughout the building. The Auditorium now has satisfactory stairs but only two obsolete passenger elevators. The consultants made a thorough study of this requirement and found that the best solution was escalators connecting every floor of the building first through fourth, one new elevator, and renewing the other elevators.

4. General renovation of the building.
   The mechanical system is obsolete and the electrical system is illegal, overloaded, and dangerous. The estimate includes a modern mechanical system, with proper heating, ventilating, and air conditioning, and a modern electrical and lighting system. It also includes the renovation of all corridors, miscellaneous rooms, toilets, and the basement. By far the greatest single expense is the new mechanical system which amounts to about one-third of the entire work.

The appropriations which were approved by the Board of Supervisors on January 30, 1960 were as follows:

1.	Construction	$6,700,000.00
2.	Architect-Engineer fee	528,000.00
3.	Department of Public Works costs	227,000.00
4.	Equipment	120,000.00
	Total	$7,575,000.00

The time schedule for the work was established as follows:

1.	Architect-Engineer contract certified	March 7, 1960
2.	Prepared Program, 1 month	April 7, 1960
3.	Review and approvals	May 26, 1960
4.	Prepare preliminary drawings (6 mos.)	Nov. 15, 1960
5.	Review and approvals	Jan. 15, 1961
6.	Prepare working drawings (9 mos.)	Sept. 15, 1961
7.	Approvals - Advertise for bids	Nov. 1, 1961
8.	Bids to be received	Dec. 13, 1961
9.	Contract to be awarded	Dec. 27, 1961
10.	Contract to be certified	Feb. 1, 1962
11.	The construction time is indeterminate at present, and depends on the number and length of interruptions which occur during construction.	

VIII. 1959 Palace of Fine Arts Bond Issue $1,800,000.00

This Bond Issue which is intended for rehabilitation and conversion of the Palace of Fine Arts, was approved by the election of November 3, 1959. It will be used in conjunction with $2,000,000 provided by the State and $2,000,000 provided from private sources, intended for restoration of the Palace of Fine Arts. The entire job is therefore $5,800,000 and will include both conversion and rehabilitation.

The exterior of the building, colonnade, and rotunda will be restored to its original form as nearly as possible, using permanent materials. The interior of the large curved hall, comprising approximately 110,000 square feet, will be converted to house the following:

1. Administrative Offices
2. Studios
3. Theatre including stage
4. Restaurant and kitchen
5. Exhibit space
6. Music Hall and stage

The estimate was prepared by, and the bonds voted to, the Recreation and Park Commission. Subsequently the Commission requested that the work be undertaken by the Department of Public Works, and the transfer was effected in June 1960.

The funds available for the project are:

(a) From State	$2,000,000.00	
(b) From private sources	2,000,000.00	
(c) 1959 Bond Issue	1,800,000.00	
Subtotal		$ 5,800,000.00
(d) State costs		50,000.00
(e) Total available		$ 5,750,000.00

The estimated cost of the work, based on the preliminary drawings is as follows:

1. Rehabilitation		
(a) Rotunda	$3,552,980.00	
(b) Colonnade	2,784,800.00	
(c) Main Building	3,304,000.00	
(d) Site work	328,040.00	
Subtotal		$ 9,969,820.00

2. Conversion	2,846,160.00
Total	$12,815,980.00
3. Available	5,800,000.00
Deficit	$ 7,015,980.00

Since the estimated cost greatly exceeds the money available, an effort is being made to develop a scope of work which can be completed without additional funds.

IX. de Young Museum Bond Issue (1960) $2,725,000.00

This Bond Issue was approved by the electorate in June 1960. It was a Recreation and Park Bond issue and the estimate was prepared by a private architect. The purpose of the Bond Issue is to provide a new West Wing for de Young Museum in which an Oriential Art collection will be housed. This art collection is being presented to the City by Mr. Avery Brundage contingent upon the City's providing a suitable building for its storage and display.

The estimate which formed the basis for this Bond Issue is as follows:

1960 Recreation and Park Bond Issue

a. Construction estimate 1962 prices		$2,288,832.00
b. Architects and Engineers fee		160,218.00
c. Exhibit cases	$240,000.00	
Architectural-fee	16,800.00	256,800.00
d. Soil borings		4,500.00
e. Full time inspection		10,000.00
f. Office furniture		5,650.00
Total		$2,725,000.00

Note: Relocation of present exhibits and remodeling of space on east side estimated at $182,000 was not included in above estimates.

The estimate shown above was not a Bureau of Architecture estimate and the design work is not being handled by this Bureau. On June 15, 1960, however, the Board of Trustees requested the Director to take over the job when plans and specifications are completed, and complete the construction. It is therefore expected that the Bureau of Architecture will be assigned this job upon completion of the drawings, possibly in the Spring of 1962.

PROPOSED BOND ISSUES

X. Public Welfare Building $3,282,000.00

At the request of the Director of Public Welfare an estimate was prepared for a new building for Public Welfare to be located on the block bounded by Octavia, Gough, Page and Rose Streets, as follows:

1. Construction	$2,168,000.00	
2. Plans and specifications	186,600.00	
3. Inflation	235,400.00	
4. Equipment	160,000.00	
5. Property	532,000.00	
Total		$3,282,000.00

The Bond Issue was approved by the Board of Supervisors and will be on the ballot of November 3, 1961.

XI. District Health Centers $3,416,000.00

At the request of the Director of Public Health an estimate was prepared for five new District Health Centers, as follows:

District No. 1 Pond, Prosper and 17th Sts	$664,800.00
District No. 2 Vicinity of Scott and Ellis Sts	667,400.00
District No. 3 4th and Clara Streets	948,000.00
District No. 4 21st St. and Potrero Ave. (S.F. General Hospital)	595,500.00

District No. 5 Quintara St. and 29th Ave.	536,900.00	
Total		$3,412,600.00

However, this Bond Issue was not approved by the Board and will not be on the November 1961 ballot although it may be reviewed later on.

XII. Civil Courts Building and
Remodelling of City Hall $22,150,000.00

During the spring of 1957 the Bureau, working in close cooperation with the architects for the Civic Center Development Plan, the advocates of a new Courts Building, and the Municipal Conference, prepared estimates for this proposed work. The Bond Issue is based on the report of the Architects and Engineers for the San Francisco Civic Center Development Plan, dated May 7, 1957. In their survey of existing conditions at the Civic Center, the consultants found that:

> "Facilities which are now provided in the Civic Center have become over-crowded requiring the use of temporary structures and rental properties. In many cases, offices are scattered and no provision for expansion is available. The present permanent spaces have become largely outmoded. It is essential that additional space be provided and that existing space be rehabilitated to provide efficient up-to-date accommodations that are suitable for the functions to be housed in them."

As a solution to the space problems the consultants recommended:

1. The construction of a new Civil Courts Building on Marshall Square to house the Municipal and Superior Courts, and all their attendant facilities, at an estimated cost of $16,207,254.

2. The remodeling of the City Hall to provide office space for the Mayor, Chief Administrative Officer, Board of Supervisors, and the majority of the City and County Departments at an estimated cost of $7,918,462.

3. The future construction of an Annex Office Building across McAllister Street from City Hall in the block bounded by McAllister, Van Ness, Polk, and Redwood Streets. This

building would be needed in the future but since it was not urgently required at present its construction should be deferred until a later date.

The total amount of the Bond Issue recommended by the Consultants is as follows:

1. New Civil Courts Building	$16,207,254.00
2. Remodelling of City Hall	7,918,462.00
Total	$24,125,716.00

This amount was later modified in conferences with interested citizens and public officials by the reduction of facilities and space as follows:

1. New Civil Courts Building	$14,379,450.00
2. Remodelling of City Hall	7,770,550.00
Total	$22,150,000.00

The Bond Issue was approved by the Mayor's Bond Screening Committee June 3, 1957, the Finance Committee on June 5, 1957, and by the Board of Supervisors on June 10, 1957. The Bond Issue was defeated in the November 1959 and 1958 elections by narrow margins, and will not be on the November 1961 ballot. It will, however, probably be revived at a later date after other facilities which are more urgently needed have been provided.

XIII. Public Library $5,190,155.00

Data was prepared for this Bond Issue which included rehabilitation and additions to the Main Library building and nine new branch libraries, in time so that it could be presented on the November 1957 ballot. However, it did not receive the support of the Mayor and downtown organizations and was therefore not on the ballot. It will probably be revived at a later date after a complete survey of the Library facilities, which is now in progress.

Courtesy Piggott Co., S.F.

EUREKA VALLEY BRANCH LIBRARY

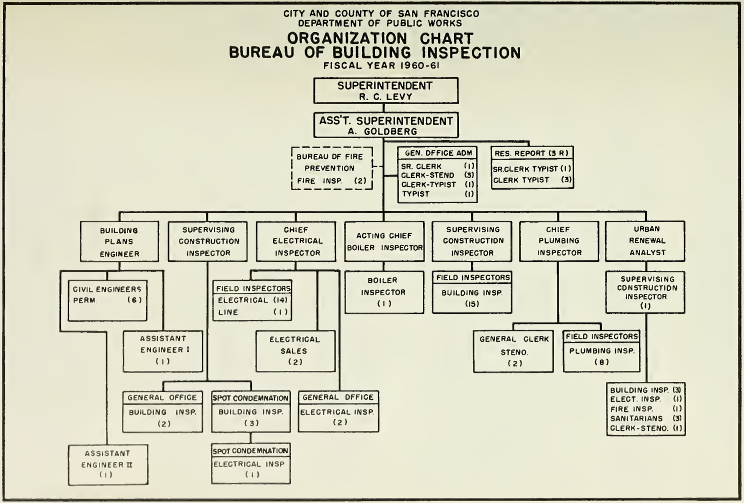
PERSONNEL

The total permanent allowance of personnel in the Bureau remained at 61, but one permanent position was not filled. Because of the lack of lists and the great amount of school vacation jobs this summer, it was necessary to employ 12 temporary employees. The total employees as of June 30, 1960 were 70.

	30 June 1960		30 June 1961		Change	
	Perm.	Temp.	Perm.	Temp.	Perm.	Temp.
City Architect	1	0	1	0	0	0
Asst. City Architect	1	0	1	0	0	0
Architects	10	0	9	0	-1	0

	30 June 1960		30 June 1961		Change	
	Perm.	Temp.	Perm.	Temp.	Perm.	Temp.
Sr. Arch. Draftsmen	10	0	10	0	0	0
Arch. Draftsmen	8	1	8	0	0	-1
Jr. Draftsmen	1	0	1	0	0	0
Office Assistant	1	0	1	0	0	0
General Clerk	1	0	1	0	0	0
Sr. Clerk	1	0	1	0	0	0
Gen. Clerk Steno.	2	2	3	1	+1	-1
Gen. Clerk Typist	2	1	3	0	+1	-1
Super. Const. Inspector	2	0	2	0	0	0
Building Inspector	15	10	17	11	+2	+1
Total	55	14	58	12	+3	-2

Total Personnel 70


CITY AND COUNTY OF SAN FRANCISCO
DEPARTMENT OF PUBLIC WORKS
ORGANIZATION CHART
BUREAU OF BUILDING INSPECTION
FISCAL YEAR 1960-61
SUPERINTENDENT R. C. LEVY
ASS'T. SUPERINTENDENT A. GOLDBERG
BUREAU OF FIRE PREVENTION FIRE INSP. (2)
GEN. OFFICE ADM SR. CLERK (1) CLERK-STENO (3) CLERK-TYPIST (1) TYPIST (1)
RES. REPORT (3 R) SR. CLERK TYPIST (1) CLERK TYPIST (3)
BUILDING PLANS ENGINEER
CIVIL ENGINEERS PERM (6)
ASSISTANT ENGINEER I (1)
ASSISTANT ENGINEER II (1)
SUPERVISING CONSTRUCTION INSPECTOR
GENERAL OFFICE BUILDING INSP. (2)
SPOT CONDEMNATION BUILDING INSP. (3)
SPOT CONDEMNATION ELECTRICAL INSP (1)
CHIEF ELECTRICAL INSPECTOR
FIELD INSPECTORS ELECTRICAL (14) LINE (1)
ELECTRICAL SALES (2)
GENERAL OFFICE ELECTRICAL INSP. (2)
ACTING CHIEF BOILER INSPECTOR
BOILER INSPECTOR (1)
SUPERVISING CONSTRUCTION INSPECTOR
FIELD INSPECTORS BUILDING INSP. (15)
CHIEF PLUMBING INSPECTOR
GENERAL CLERK STENO. (2)
FIELD INSPECTORS PLUMBING INSP. (8)
URBAN RENEWAL ANALYST
SUPERVISING CONSTRUCTION INSPECTOR (1)
BUILDING INSP. (3) ELECT. INSP. (1) FIRE INSP. (1) SANITARIANS (3) CLERK-STENO. (1)

BUREAU OF BUILDING INSPECTION

ROBERT C. LEVY, SUPERINTENDENT

The functions and organization of the Bureau of Building Inspection have been covered in detail in past reports, and the organization is indicated on the organization chart in this report. For details of the Bureau operation the reports of the fiscal year 1958 and 1959 are referenced.

Briefly the function of the Bureau is to insure compliance with the City Building, Housing, Plumbing, and Electrical Codes, the State Housing Act, the State General Safety Orders as well as other State laws. The Bureau accomplishes the function by means of reviews of plans, and the inspection of construction, alteration and installation involving structural, electrical, plumbing, and certain mechanical work throughout the city. In addition it inspects existing buildings and structures to obtain their compliance with the applicable laws. The Bureau also proposes new legislation affecting buildings and structures and analyzes and reports on legislation proposed by other departments and by the State.

During the 1960 fiscal year, the Bureau of Building inspection was involved in several programs of both new and unusual character. These involved such diverse items as the revision of the 1958 San Francisco Housing Code; and establishing and commencing operations of the Residential Reports Requirements Division, stimulation of a need for a study of how to eliminate overlapping inspection jurisdiction by various departments; anticipation of the Western Addition and Diamond Heights Redevelopment Project inspection needs; furnishing detailed operational data to the Mayor's "Committee on Governmental Operation," - "Blythe Zellerbach" and the initiation of the first annual revision to the San Francisco Building Code since its adoption in 1956. In addition several programs were initiated to improve the services performed by the Bureau. These programs will be more fully explained in the following text:

1. San Francisco Housing Code:

The main points involved in the new Housing Code amendments concerned retroactive provisions which would provide fire and safety features in existing apartment houses and hotels and primarily concerned themselves with smoke barriers and stairway enclosures, sealing of transoms and requirements relative to electrical outlets in each room.

During the spring of 1960 the Bureau undertook the first revision of the 1958 San Francisco Housing Code. By September 1960 these proposed revisions had been sent to all groups concerned and in October 1960, the Bureau of Building Inspection held a public meeting of these groups so that they might express their views on the proposed amendments.

The Chamber of Commerce, through its Building Code Committee coordinated the diverse industrial and management groups in this matter. In January 1961 the proposed amendments to the Housing Code were sent to the Board of Supervisors.

There ensued a considerable number of hearings before the Public Health and Welfare Committee of the Board and the full Board.

The main contention of the opposition revolved about the cost of the new retroactive legislation. The Bureau's position was, that although not in favor of retroactive legislation in general, these provisions were both necessary and economically justifiable. Its reports to the Board of Supervisors confirmed both the need and the costs. At the close of the fiscal year the matter was in committee for the third time awaiting transmittal to the Board of Supervisors.

2. Residential Requirements (3-R) Reports:

In the spring of 1960 the Board of Supervisors enacted into law, the mandatory requirements that the seller of residential property must furnish the buyer with a report furnished by the City, stating the legal status of the property.

The purpose of this ordinance is to furnish buyers of residential property the status of a building as recorded in the city records so that they may evaluate their economic risk.

In particular the following was required in the report:

Original occupancy or use
Present authorized occupancy or use
Zoning classification
Whether or not within the Fire Limits
Whether or not certificate of occupancy issued
Occupancy Classification
Date of construction of building
Construction, alteration or conversion permits issued if any
Whether Building or Plot plan are on file
Number of structures on property
Whether city licensed, if any, has been issued

As an alternative the buyer might waive this report by signing a form and sending it to the Bureau of Building Inspection. In order to set up the complex machinery needed for this new law, the effective date was postponed from July 1, 1960 to December 1, 1960, and on that latter date the new division started operations. It was anticipated that over 10,000 real estate transactions per year would be handled by the Division. Assurances were given, at the various meetings of the Board of Supervisors, that the reports would be furnished on a 24-hour basis so that real estate transactions would not be impaired by the new ordinance.

Many public appearances by the Superintendent were made to familiarize all real estate groups with the intent and mechanics of the new ordinance. As of the end of the fiscal year it was found that there had been a possible 30% non-compliance with the ordinance and investigation was being pursued to record those who are not in compliance with the ordinance as well as the procedures for increasing compliance. In order to handle the work load, 4 new personnel were added to the Bureau, consisting of one senior Clerk-typist, and 3 general clerk-typists.

As a service feature, a procedure was included in the ordinance to permit a physical inspection to be made of a building upon request of the owner to inform him of the status of his building, relative to the applicable code requirements. This inspection requires the payment of $35 per habitable story. Few property owners have availed themselves of this inspection service.

3. Overlapping Inspection Study:

In order to eliminate overlapping inspections between this Bureau, Fire Prevention and Public Health, the Bureau of Building Inspection, at various meetings, urged that an outside study be made; first to determine the proper inspection jurisdictions for the various groups, building, health, and fire, and second, to suggest the changes in the laws that are necessary to set up the areas of jurisdictions.

It was believed by the Bureau that because the various interests within the city were too close to the subject to be completely objective that the study would best be made by an outside management group.

The Bureau believes that large personnel savings and better service to the public would result from such a comprehensive study.

Although no definite action had been taken by the close of the fiscal year there was indication that within the next fiscal year such a study would be under way.

4. Redevelopment Work:

The Redevelopment Agency in the fall of 1960 and spring of 1961 submitted data that would indicate a tremendous increase in construction resulting from the Western Addition and Diamond Heights Redevelopment Project. Their estimates indicated there could be in the 1961 Fiscal Year upwards to Fifty Million Dollars of new redevelopment area construction on the way at the close of that year.

In order to anticipate and cope with the resultant inspection load a budgetary request for additional personnel in all three inspection fields was submitted. The budget finally adopted, granted one building inspector on the assumption that the additional personnel would be requested as the actual need developed.

As of June 1961, the Bureau is aware of a very large number of buildings presently being designed particularly in the Western Addition.

The Diamond Heights architectural competition has been completed with the top five sets of designs submitted to competitive bidding by contracting groups and therefore the impending development work surge is expected by the early spring of 1962. It is anticipated that there would be needed two additional building inspectors, two electrical inspectors and two plumbing inspectors all assigned to handle the Redevelopment work so as not to delay or hinder the normal inspection procedures in the remainder of the City.

5. Mayor's Committee on Governmental Organization "Blythe Zellerbach"

The Bureau was studied intensively by a task committee of Mayor's Committee to determine areas of improvement and where economies might be effected in the present operations. The detailed report of this committee was submitted at the close of the fiscal year and the general findings of the committee were as follows: Need for improved quarters; additional top-level code personnel; elimination of overlapping inspections through a study; raise inspection personnel qualifications and salary; additional personnel to adequately service public; additional supervisory personnel for Electrical and Building Inspection Divisions, electrical engineer to head Electrical Inspection Division, establish and staff mechanical inspection division.

It is hoped that those improvements recommended by the Blythe Zellerbach Committee and which would result in a saving to the citizens of San Francisco, through improvement of the procedures, inspections and operations of the Bureau of Building Inspection might speedily be embodied into law and supplemented as necessary through new laws, appropriations and transfer of personnel.

6. The San Francisco Bulding Code.

The 1956 San Francisco Building Code included, within its enactment ordinance, the requirement for annual review. Due to lack of personnel in the intervening years and to the subsequent change in administrative personnel the Bureau was unable to prepare an annual revision until this fiscal year. However, throughout the last two years a file of recommendations, ambiguities, conflicts within the code, etc., was prepared so that these would form the basis of the code revision.

In January 1961, the Assistant Superintendent was assigned the duty of drafting the necessary revision of the San Francisco Building Code. The following procedure was adopted as representing the most equitable review procedure:

a. The prospective code section revisions were prepared and copies distributed within the Bureau to key personnel for their review and comments.

b. Upon completion of the inter-bureau review and revision of the proposed amendments, the same were submitted to the Fire Department for their review and comments.

c. Upon completion and revision, the proposed amendments were stenciled and distributed to a prime mailing list (totaling 47 groups) and consisting of all professional organizations and major industrial representatives as well as a secondary mailing to those particular companies or organizations that would be affected by portions of the code. The code review process was divided into six submissions so that as each submission was completed industry could commence its review of these rather than loading a very large amount of code revision on industry and thereby lessening their review ability. The first submission of the proposed code amendments was sent to industry in March of 1961 and additional submissions were sent throughout the remainder of the year.

d. The organizations were asked to submit their comments within 60 days and upon receipt and review of same, additional revisions to the code were to be made. The submissions were again to be sent to industry for their review and a tentative transmittal date for submission to the Board of Supervisors was set as October or November 1961.

e. Groups that had information or comment were invited to submit their comments in writing or arrange for meetings with the Bureau so that there would be a full hearing afforded prior to submission to the Board.

f. The Chamber of Commerce, through its Building Code Section, agreed to act as co-ordinator of all review procedures of industry as well as a professional review body. They would attempt a resolution of the conflicts wherever possible. Meetings were held and will be held on each of the six submissions of the code.

It is anticipated that there will be over 400 changes, both major and minor in character, to the Building Code. Major changes involve reduction of corridor wall fire-resistive construction requirements from 2-hours to 1-hour; raising the requirement for doors in such corridoors to 3/4-hour fire ratings; complete revision of Article 21 dealing with exits; complete review of designation for fire doors and fire windows to utilizing the hour rating system rather than alphabetical system; complete revisions to lateral force requirements of the code; provision for prestress concrete design; plastic design in steel; and many other both major and minor text changes throughout the code.

In order to lessen the amount of paper work and printing that would be necessary by this extensive change in the code a preliminary code change was submitted to the City Attorney for transmittal to the Board of Supervisors which would change the present sub-section designations throughout the Building Code into full section. This technical change in designation, it is believed, will save over 50% of typing necessary in the code change.

The annual review of the Building Code on a continuing basis has been established with a cut-off date for submissions of new code changes set in November of each year. Therefore, the next annual code change study will commence November 1961, or approximately the date of submission of the 1961 code change to the Board of Supervisors.

7. New Fees and Penalties:

Effective December 1, 1960, as a result of a review of the financial status of the Bureau, there resulted increased plumbing and electrical permit fees and reduced building inspection fees. In accordance with the charter, the cost of inspection must be borne by the fees collected. Meetings were held with industry representatives to determine the equitable fee adjustments that were required. These meetings resulted in recommendations which were forwarded to the Board of Supervisors and which were enacted in law by the Board.

In addition to adjusting the fees, a penalty fee of ten times the cost of the permit was established by ordinance in place of the previous two-time penalty. As a result of these changes the number of permits applied for has increased approximately 20% during the latter part of this fiscal year and increased safety will result to the people of the City as a result of more work being done under permit and inspection.

The Bureau of Building Inspection is therefore by law and in practice, in all its fee collecting services, a self-supporting operation paid for out of the fees collected.

8. City Instituted Inspections:

A standardized procedure of operation by Bureau inspection personnel was established to handle city instituted inspections.

When orders to correct deficiencies are issued to an owner by other City Departments, the Bureau will inspect the entire structure and furnish the owner a complete picture of the status of the building relative to the applicable codes. This is a "stop-gap" procedure to be used until the overlap inspection jurisdiction, study, referred to under Item 3, is completed.

Other activities of the Bureau that were of note are:

Budget: In the 1961-62 budget requests of the Bureau as in 1960-61 and other years, the Bureau requested funds and personnel to staff the mechanical Inspection Division required to administer the sections of the 1956 Building Code dealing with elevators, air conditioning, heating, and ventilating. These funds were denied. It is therefore the intention of the Bureau in the next fiscal year to again request these funds or request that the code provisions be deleted since the Bureau has no means of enforcing them.

The Bureau was granted the increased plan checking personnel that it is seriously needed by the addition of 3 engineers to its permanent structural staff. In addition, in the 1961-62 budget additional plan checking personnel were approved to handle the Redevelopment Projects.

State Legislation: In the 1961 session of the State legislature there was introduced two bills that would directly affect the Bureau and the city; these were bills AB 787 and 1735. The Bureau led a state-wide review of these bills and resulted in their being amended to grant cities and counties the right to retain control of their inspection operations.

Bill AB 787 is the new State Housing Act and AB 1735 which was vetoed by the Governor, was to establish a Building Standards Division in the State Government.

Boiler Inspections: A revision of the procedures used by the Bureau Boiler Inspectors resulted in a considerable reduction in the number of uninspected and uninsured boilers in the city with the resultant increase in safety to the public.

The dental profession was made aware of the hazards of uninspected and illegal air compressor tanks that they inadvertently were using as a result of recent improvement in their techniques. The air tank manufacturers and suppliers have been notified and are cooperating to bring these tanks into compliance with city wide and state standards. San Francisco has led the way in this particular field of inspection.

Hilton Hotel: The permit application to erect the Hilton Hotel was denied by this Bureau and the Bureau of Fire Prevention and Public Safety on the grounds that the proposed plans were in violation of the San Francisco Building and Housing Codes and the State Housing Act. After being overruled by the Board of Permit Appeals the Director of Public Works refused to issue the permit on the advice of the City Attorney. The matter went to the courts and the District Court of Appeals ordered the permit to be issued. The City filed for a hearing to the State Supreme Court which was denied. On December 27, 1960 the permit was issued.

Approval of New Materials: With the ever increasing new product development programs, the materials of construction are constantly being improved upon and changed. In order to permit the use of the latest and best materials, a procedure of approval review under the Assistant Superintendent was initiated by the Bureau.

Approved new materials lists are compiled every two months and distributed to all inspectors and interested outside organizations. In addition the Daily Pacific Builder, the construction newspaper, reprints the lists for use by engineers, architects and contractors.

Training of Inspection Personnel: Training sessions were held at frequent intervals to assist the inspection personnel in their work. Subjects of the sessions included the new City Planning Code provisions, city government, new code amendments, and technical sessions in materials. In addition the division heads hold technical sessions with their personnel to assure uniformity of code interpretation and provide technical information needed in day to day inspection work.

Public Relations: The many diverse activities of the Bureau makes a good public relations program a necessity. The Superintendent therefore has appeared before groups and organizations interested in any of several of the programs and procedures of the Bureau.

Before new legislation is proposed, Bureau personnel have held meetings to inform all concerned of the purpose and scope of the legislation and the reasons for same.

The press and television has materially aided the Bureau in keeping the public informed with definitive and factual accounts of Bureau programs and problems.

Urban Renwal Program: The Urban Renewal Division completed its first full year of operation in the Conservation Areas. These areas have good housing and are good neighborhoods and the purpose of the program is to keep them good and prevent the development and spread of blight. All buildings in this area are inspected and reports made to the owner.

The two designated areas are Pacific Heights and Visitacion Valley and these areas contain 3700 structures with 11,000 dwelling units and 24,000 persons.

A summary of the inspections and findings in each of the areas is as follows:

Pacific Heights Conservation Areas:

Area	Date Designated	Total Bldgs.	Bldgs. Inspected	Violations Detected	Buildings Brought Into Code Compliance
One	Nov. 1959	143	143	133	51
Two	Feb. 1960	186	184	162	60
Three	July 1960	342	328	265	65
Four	Oct. 1960	539	119	94	0
Five	Apr. 1960	649	19	19	0
		1,859	793	673	184

Visitacion Valley Conservation Areas:

Area	Date Designated	Total Bldgs.	Bldgs. Inspected	Violations Detected	Buildings Brought Into Code Compliance
One	Oct. 1960	578	225	106	109
Two	Oct. 1960	641	20	17	15
Three	Oct. 1960	622	13	9	7
		1,841	288	132	121
Total Buildings		3,700	1,081	805	305
Total Dwelling Units		11,000	6,560	3,982	1,031

In Pacific Heights the estimated cost of corrective work per dwelling unit is $140, with an average of 5 dwelling units per building.

In Visitation Valley the estimated cost of corrective work is $60 per dwelling unit, with an average of 1 dwelling unit per building.

Cooperation between the property owner and the City has been very good. All cases of objection and appeal have been resolved without recourse to the courts.

STATISTICAL SUMMARY

BUILDING INSPECTION DIVISION

Type of Construction	1959-60 No. of Permits	Est. Cost	1959-61 No. of Permits	Est. Cost
1A	18	$ 16,166,497	15	$ 32,141,513
1B	10	30,846,857	5	10,520,349
2	--	-	--	-
3	27	3,420,351	27	4,925,600
4	24	727,045	26	913,319
5	1,025	37,101,047	896	37,881,990
Alterations	10,190	32,369,759	11,896	$ 33,904,019
Totals	11,294	$120,631,556	12,865	$120,286,790

Type 1A - Steel frame with reinforced concrete walls and floors. Fire-resistive construction.

Type 1B - Built entirely of reinforced concrete. Fire-resistive construction.

Type 2 - Similar to Type 1, but with limitations

Type 3 - Wood frame floors with exterior walls of masonry. Ordinary masonry construction.

Type 4 - Light incombustible frame construction.

Type 5 - Wood frame construction.

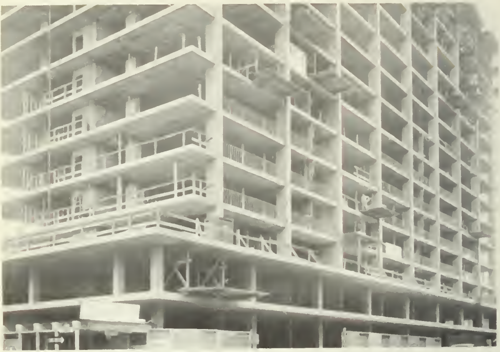
BUREAU STATISTICS FOR FISCAL YEAR	1959-60	1960-61
Inspections reported by building inspectors..........	54,888	59,881
Projects remaining on which permits have been issued that have not been reported completed by building inspectors	4,565	4,712
Complaints reported that have been adjusted by building inspectors..........................	4,141	3,636
Inspections reported by boiler inspectors............	1,339	1,871
Complaints and requests for information recorded.....	211	234
Applications for permits examined by and approved by structural engineers	3,949	3,799
Applications for permits examined and approved by plan checker	1,376	1,171
Miles traveled during the year by vehicles on inspection service	307,210	321,011
ELECTRICAL INSPECTION DIVISION		
Permits issued, wiring, fixtures, signs	17,115	14,257*
Inspections made	56,490	47,655*
Complaints investigated (found defective)............	4,595	3,182
Installations uncovered that were not with permits	2,705	2,586
Installations in progress as of June 30, 1961	5,408	4,444
Installations completed	16,826	15,218
Pin ball machine inspections	520	476
Juke box inspections	60	96
Electrical sales inspections	3,996	3,285*
Overhead line inspections	4,224	4,479

PLUMBING INSPECTION DIVISION

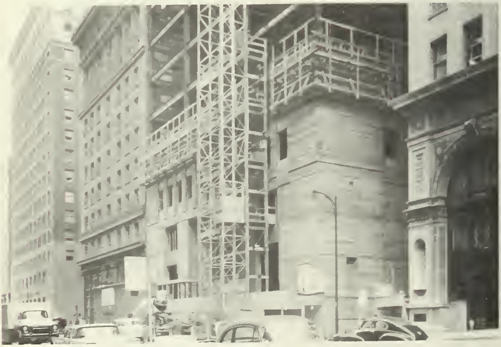
Plumbing permits issued	6,665	4,327≑
Water permits issued	511	855
Water permits combined with plumbing	-----	3,353
Gas piping and appliance permits	8,890	12,464
Gas permits on plumbing	5,816	6,032
Plumbing inspections made	12,969	14,295
Water Inspections made	2,690	3,357
Plumbing complaints investigated	2,354	1,037
Gas piping complaints investigated	8	5
Gas appliance complaints investigated	266	214
Plumbing installations completed	3,968	4,787
Gas lines inspected final	4,116	4,045
Gas appliances approved	10,085	11,654

≑ Reduction in number of permits resulted from new permit application forms which permits combination of different types of work on one permit.

* Decrease in Number of inspections due to considerable loss of time due to illness this fiscal year.

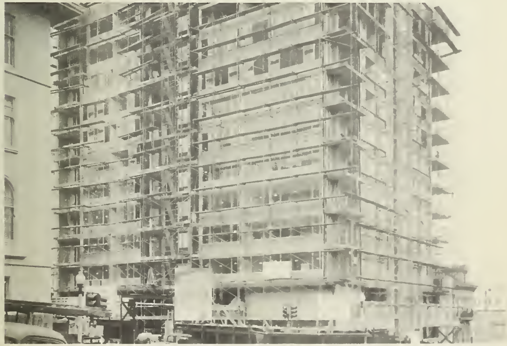


THE COMSTOCK - CLAY AND JONES STREETS

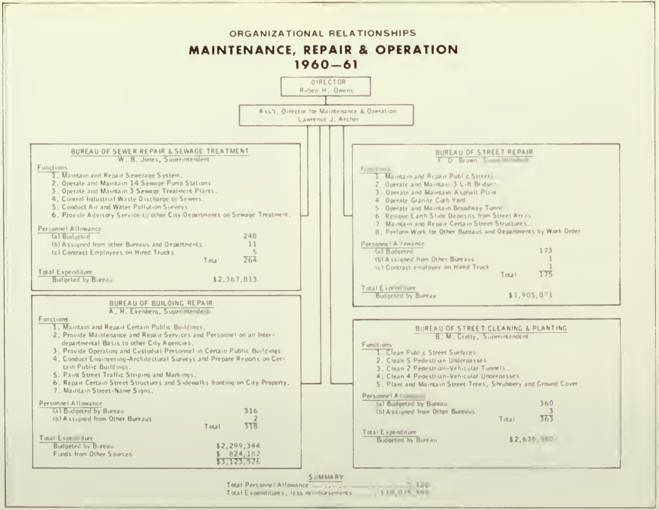


HEAD OFFICE - WELLS FARGO BANK AND AMERICAN TRUST

DEL WEBB TOWN HOUSE - 8TH AND MARKET STREETS



1800 PACIFIC AVE. APARTMENTS



ORGANIZATIONAL RELATIONSHIPS

MAINTENANCE, REPAIR & OPERATION

1960—61

DIRECTOR
Ruben H. Owens

Ass't. Director for Maintenance & Operation
Lawrence J. Archer

BUREAU OF SEWER REPAIR & SEWAGE TREATMENT

W. B. Jones, Superintendent

Functions

1. Maintain and Repair Sewerage System.
2. Operate and Maintain 14 Sewage Pump Stations
3. Operate and Maintain 3 Sewage Treatment Plants.
4. Control Industrial Waste Discharge to Sewers.
5. Conduct Air and Water Pollution Surveys
6. Provide Advisory Service to other City Departments on Sewage Treatment.

Personnel Allowance	
(a) Budgeted	248
(b) Assigned from other Bureaus and Departments	11
(c) Contract Employees on Hired Trucks	5
Total	264

Total Expenditure	
Budgeted by Bureau	$2,367,813

BUREAU OF BUILDING REPAIR

A. H. Ekenberg, Superintendent

Functions

1. Maintain and Repair Certain Public Buildings.
2. Provide Maintenance and Repair Services and Personnel on an Interdepartmental Basis to other City Agencies.
3. Provide Operating and Custodial Personnel in Certain Public Buildings
4. Conduct Engineering-Architectural Surveys and Prepare Reports on Certain Public Buildings.
5. Paint Street Traffic Striping and Markings.
6. Repair Certain Street Structures and Sidewalks fronting on City Property.
7. Maintain Street-Name Signs.

Personnel Allowance	
(a) Budgeted by Bureau	316
(b) Assigned from Other Bureaus	2
Total	318

Total Expenditure	
Budgeted by Bureau	$2,299,344
Funds from Other Sources	$ 824,182
	$3,123,526

BUREAU OF STREET REPAIR

F. D. Brown, Superintendent

Functions

1. Maintain and Repair Public Streets
2. Operate and Maintain 3 Lift Bridges
3. Operate and Maintain Asphalt Plant
4. Operate Granite Curb Yard
5. Operate and Maintain Broadway Tunnel
6. Remove Earth Slide Deposits from Street Areas
7. Maintain and Repair Certain Street Structures
8. Perform Work for Other Bureaus and Departments by Work Order

Personnel Allowance	
(a) Budgeted	173
(b) Assigned from Other Bureaus	1
(c) Contract employee on Hired Truck	1
Total	175

Total Expenditure	
Budgeted by Bureau	$1,905,871

BUREAU OF STREET CLEANING & PLANTING

B. M. Crotty, Superintendent

Functions

1. Clean Public Street Surfaces
2. Clean 5 Pedestrian Underpasses
3. Clean 2 Pedestrian-Vehicular Tunnels
4. Clean 4 Pedestrian-Vehicular Underpasses
5. Plant and Maintain Street Trees, Shrubbery and Ground Cover

Personnel Allowance	
(a) Budgeted by Bureau	360
(b) Assigned from Other Bureaus	3
Total	363

Total Expenditure	
Budgeted by Bureau	$2,67[illegible]

SUMMARY

Total Personnel Allowance	1,120
Total Expenditures, less reimbursements	$[illegible]

MAINTENANCE AND OPERATION

LAWRENCE J. ARCHER, ASSISTANT DIRECTOR

GENERAL

Maintenance and operation activities in the Department of Public Works are concentrated in the 4 bureaus of Building Repair, Street Cleaning and Planting, Street Repair, and Sewer Repair and Sewage Treatment. These bureaus are administered through the Assistant Director-Maintenance and Operation.

The work-load of the bureaus continued at about the same level as during the previous year, except that the new Fourth Street Sewage Pumping Plant was placed in operation on January 24, 1961. This new plant with related sewers and structures cost $525,179; $509,229 for construction, including plans and specifications, and $15,950 for land, and has a design capacity of 16 mgd.

Also, a considerable extent of bureau time was devoted to answering of inquiries made during the J. L. Jacobs Job Classification Survey and the Mayor's Committee for Municipal Management.

The annual rainfall for San Francisco as recorded by the Federal Bureau from June 30, 1960 to July 1, 1961 amounted to 13.87 inches as compared to a rainfall of 15.47 inches in 1959-60.

PERSONNEL

Personnel allowances as budgeted by the respective bureaus totalled 1097 as compared to 1117 in 1959-60. In addition 17 employees from other bureaus and 6 contract employees on hired trucks are assigned to direction under the maintenance and operation bureaus.

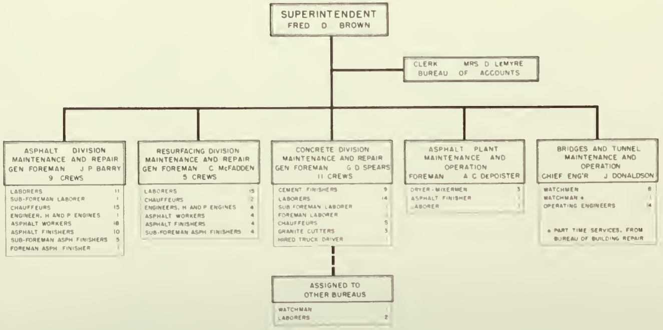
EXPENDITURES

Expenditures of maintenance and operation bureaus amounted to $9,251,408 from budgeted appropriations and $824,182 from funds received by work order; or a total of $10,075,590. This total expenditure represents a per capita cost of $14.08, based on a population of 715,609 recorded by Federal census in 1960.

ORGANIZATION CHART

BUREAU OF STREET REPAIR

CITY AND COUNTY OF SAN FRANCISCO
JUNE 30, 1961



BUREAU OF STREET REPAIR

F. D. Brown, Superintendent

FUNCTIONS

The functions of the Bureau of Street Repair continue to be substantially as stated in previous reports:

Routine work includes the maintenance and repair of streets and appurtenant structures such as gutters, curbs, retaining walls, public stairways, pedestrian underpasses and overpasses, guard rails and fences; the maintenance of City dumps; the maintenance and operation of lift bridges and tunnels.

Work ordered by the Director includes traffic channelization, minor street alterations, minor construction and emergency work for the protection of the City and/or the public.

Work performed for other departments or bureaus includes the repair of pavement in Municipal Railway track areas, the repairing of trenches opened by the Bureau of Sewer Repair for the installation or repair of side sewers, the repair of state highways within the City and the repair of pavements in school yards and the yards of other City institutions. The Bureau also performs other minor services of varied nature.

The City's charter provides that repair or reconstruction on any one job shall not exceed a cost of $2000. It also prohibits work on unaccepted streets, except in emergency, and on sidewalks in front of private property. Unaccepted streets are those streets that have not been properly improved and officially accepted for maintenance and repair by the City.

Activities are furtherlimited by state law governing the expenditure of monites from which the bureau is financed.

Maintained road mileage is as follows:

Secondary Streets (Secondary roads)	619.13
Major Streets (Primary roads)	193.73
State Highways	13.88
Total	826.74

Inasmuch as San Francisco is a combined city and county, its street and road systems are one and the same.

ORGANIZATION AND PERSONNEL

The organization and personnel of the bureau remained about the same as for the previous year. One new employment, Engineer of Hoisting and Portable Engines, was provided in the 1960-61 budget. An organization chart, as of June 30, 1961, accompanies this report.

The new employment had been sought for several years. Although temporary operators had been employed from time to time, the increased use of mechanical equipment permitted by this full-time employment should be reflected by increased quantities of work performed and/or decreased unit costs.

On July 18, 1960, Mr. Alvin C. DePoister was given permanent appointment in Class 0254 Foreman, Asphalt Plant, thereby filling a vacancy that had existed since July 16, 1959.

MUNICIPAL ASPHALT PLANT

Asphaltic mixtures produced at the Municipal Asphalt Plant during 1960-61 were as follows:

		COMPOSITION %				
Mix Designation	Tons	Asphalt	#6	5/16"	5/8"	1¼"
Surface	3,392	8½	91½			
School	6,532	7	60	33		
Topeka	38,413	6	45	25	24	
Spreader	-	5½	40	25	17½	12
Binder	627	3½	21	28	22½	25
Cold	156	*	35½	27½	30½	
Total	49,120					

* - ½% asphalt and 6% Pacific specification 300 fuel oil.

Aggregates were screened into "hot bins" from a combination of Antioch (fine graded) sand, coarse graded sand and three sizes of gravel. Asphalt used was 60-70 penetration, paving grade.

Production costs for the 49,120 tons produced during the year were as follows:

Direct Labor	$ 45,363 or	$0.92 per ton
Indirect Labor	1,950 or	.04 per ton
Overhead	10,744 or	.22 per ton
Materials	191,036 or	3.89 per ton
Gas, Electricity, etc.	16,671 or	.34 per ton
Total	$265,764 or	$5.41 per ton

All maintenance work and worn part replacement was done during slack work days or on Saturdays with the following exception On Saturday, March 11, 1961, the "hot" elevator was dropped while crew was replacing a worn section of chain; elevator was raised and plant resumed operation at 3:30 p.m. on Monday, March 13, 1961.

During March 1961, the storage bins, including elevator, feed and discharge assemblies, were cleaned, primed and painted. The work was done as a contractual service by the Bureau of Building Repair for a cost of $1,918.00.

EXPENDITURES

Accompanying tabulations show expenditures for each of the several budgeted items for each of the past five years. Percentage increases for road repair costs, wage rates and materials prices are shown for "Street Repair." Percentage increases for bridge and tunnel maintenance and operation costs and for salary rates are shown for "Bridges and Tunnel."

EXPENDITURES

STREET REPAIR

Budget Item	1956 - 57	1957 - 58	1958 - 59	1959 - 60	1960 - 61
Permanent Salaries	$ 34,674	$ 37,467	38,904	41,401	44,817
Allowance for Overtime	96	163	59	109	43
Allowance for Holidays	491	582	771	773	878
Temporary Salaries	567	387	1,346 (a)	1,806 (a)	139
Wages	741,171	828,883	885,991	934,412	994,338
Contractual Services	100,535	84,244	83,840	93,325	89,469
Auto Mileage-Employees' Cars	80	61	23	24	38
Truck Hire	36,115	10,271 (b)	11,507	12,195	12,983
Materials & Supplies	225,332	250,736	256,085	253,323	259,575
Equipment	51,836	48,224	93,286	20,652	52,479
Accident Compensation	7,889	8,187	12,801	19,759	11,220
Automobile Insurance				627	6,820
Retirement Allowance (c)	177,237	202,207	206,886	198,809	203,235
Employer's Tax, Social Security				16,165 (c)	24,941 (c)
Allowance for Medical Plans			3,007 (c)	7,566 (c)	9,160 (c)
Services of Other Departments	17,812	19,787	21,181	22,936	23,331
Sub-Total	1,393,835	1,491,199	1,615,687	1,623,882	1,733,466
Improvements	16,292	3,158	19,202		
Gross Expenditures	1,410,127	1,494,357	1,634,889		
Road Repair Costs; % Increase:					
Over Previous Year		6.5	6.0	6.8	5.2
Over 1956-57		6.5	12.9	20.6	26.9
Wage Rates; % Increase					
Over Previous Year		7.0	6.5	6.4	5.8
Over 1956-57		7.0	14.0	21.3	28.3
Materials Prices: % Increase:					
Over Previous Year		12.8	1.6	-1.1	- .6
Over 1956-57		12.8	14.6	13.4	12.7

(a) Sick Leave Relief for retiring General Foremen.
(b) Six Hired Trucks replaced with City-owned trucks.
(c) Includes Allowance for other Bureaus and Departments.

EXPENDITURES

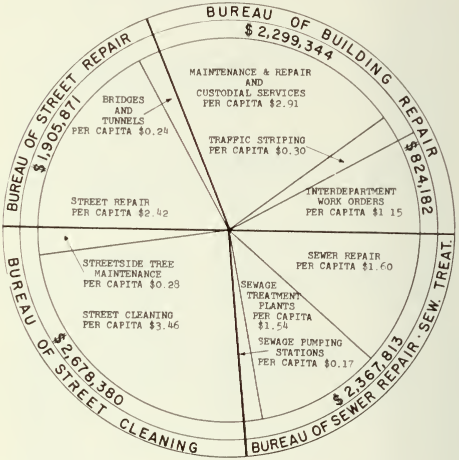
BRIDGES AND TUNNELS

Budget Item	1956-57	1957-58	1958-59	1959-60	1960-61
Permanent Salaries	$114,986	$120,242	$123,669	$126,754	$124,888
Allowance for Overtime	12	43	17	38	39
Allowance for Holidays	3,714	5,790(a)	5,687	5,725	5,699
Temporary Salaries	13,560	10,167	13,151	6,297	9,768
Contractual Services	17,170	21,428	15,725	18,181	20,418
Materials and Supplies	2,073	1,206	1,180	1,224	1,448
Services of Other Departments	7,992	8,557	8,387	8,923	10,145
Total Expenditures (b)	$159,507	$167,433	$167,816	$167,142	$172,405
Expenditures; % Increase					
Over Previous Year		5.0	.2	-.4	3.1
Over 1956-57		5.0	5.2	4.8	8.1
Salary Rates; % Increase					
Over Previous Year		5.1	4.0	5.3	0.3
Over 1956-57		5.1	9.3	15.1	15.4

(a) Rate increased from "straight time" to "time and one-half."

(b) Accident Compensation, Retirement Allowance, Employer's Social Security Tax and Allowance for Health Service System are included in Street Repair Budget.

PER CAPITA COST FOR MAINTENANCE · REPAIR OPER'T'NS



TOTAL COST PER CAPITA PER ANNUM
FISCAL YEAR 1960-61

WORK PERFORMED

Asphalt Resurfacing - Hand	Unit	Quantity	Total Cost	Unit Cost
Asphalt Paving	Sq. Ft.	128,631	$ 18,380	$ .143
(134.3 Sq.Ft. per ton)	Ton	958		19.186
Asphalt Resurfacing- Machine				
Asphalt Paving	Sq. Ft.	4,976,822	258,339	.052
	Ton	28,775		8.978
(173.0 Sq. ft. per ton)				
Asphalt Resurfacing - Box				
Asphalt Paving	Sq. Ft.	1,062,460	83,462	.079
	Ton	6,183		13.499
(171.8 Sq. ft. per ton)				
Asphalt Patching				
Asphalt Patching	Sq. Ft.	858,808	231,019	.269
	Ton	6,067		38.078
(141.6 Sq. ft. per ton)				
Asphalt Paving (cut out)				
Compressor Work	Sq. Ft.	228,966	44,093	.193
Asphalt Paving	Sq. Ft.	242,182	84,804	.350
	Ton	3,947		21.486
Cleanup			83,819	
Totals	Sq. Ft.	242,182	212,716	.878
(61.4 Sq. Ft. per ton)	Ton	3,947		53.893
Curb Reset and Replaced				
Compressor Work	Lin. Ft.	35,515	37,212	1.048
Granite Reset	Lin. Ft.	15,189	17,025	1.121
Granite, Replaced	Lin. Ft.	3,090	5,196	1.682
Concrete, Reset	Lin. Ft.	13,357	16,626	1.245
Concrete, Replaced	Lin. Ft.	4,423	13,027	2.945
Pavement, Asphalt	Sq. Ft.	19,508	16,423	.842
Pavement, Concrete	Sq. Ft.	1,026	2,211	2.155
Sidewalk	Sq. Ft.	34,017	34,544	1.015
Cleanup	Lin. Ft.	36,059	57,622	1.598
Total		36,059	199,886	5.543
Concrete Curb Repair			20,277	

WORK PERFORMED (Continued)

	Unit	Quantity	Total Cost	Unit Cost
Curb Yard				
Redress Granite Curb	Lin. Ft.	5,065	13,720	2.709
Sort, Move, etc.			4,898	
Total			18,618	
Crack Sealing				
Sealing	Lin. Ft.	2,254,136	158,577	0.0703
Cleanup			27,278	
Total	Lin. Ft.	2,254,136	185,855	0.0825
Manhole Casting Reset	Each	468	29,035	62.04
Concrete Pavement Repaired	Sq. Ft.	18,553	31,161	1.679
Sidewalk Reconstructed	Sq. Ft.	10,432	15,850	1.519
Mud Jacking			5,008	
Heater Planing	Lin. Ft.	221,883	47,626	0.215
Slide & Debris Cleanup			19,166	
State Highways				
Asphalt Paving	Sq. Ft.	22,578	3,653	0.162
Work for Other Bureaus and Depts.			73,783	
Asphalt Paving	Sq. Ft.	167,784		
Concrete Paving	Sq. Ft.	8,139		

RESURFACING

"Resurfacing" is the placing of an asphaltic mat over existing pavement for various reasons. Preliminary work such as patching, leveling or heater-planing may or may not be necessary.

San Francisco's streets are now in such condition that virtually all resurfacing is done because existing asphaltic wearing surface has become moderately worn and/or fines have eroded from the surface material. About seventy percent can be done without preparatory work. Of the remaining thirty percent, preparatory work generally consists of heater-planing to increase gutter depth. On rare occasion, heavy trucking in connection with local building damages a street to the extent that it must be resurfaced. Also, on rare occasion, a neglected street is discovered.

Each year, the City's streets are inspected and a resurfacing program prepared for the ensuing year. The inspection may be more or less cursory and incomplete but sufficient to assure that all resurfacing programmed is warranted. The need for resurfacing is determined by observation and is a matter of personal judgment; mechanical devices are not used.

The Bureau's program, although not effective until the following July, is made known to other City agencies and public utilities in December. This allows time for City agencies to resolve program conflicts before budgets are submitted and public utilities to make any necessary adjustments to their underground plant before resurfacing commences.

Resurfacing is done by three methods: - Mechanical spreader, box spreader and hand. The mechanical spreader has been in use since July 1952 and the box spreader since October 1957. The following tabulation indicates the trend of the use of the three resurfacing methods.

Square Feet Resurfaced

Year	Machine	Box	Hand
1952-53	2,672,000		774,200
1954-55	3,501,900		275,200
1955-56	5,249,300		207,200
1957-58	4,529,400	558,600	70,800
1960-61	4,976,800	1,062,500	128,600

The large increase in production in 1955-56 was made possible by the new asphalt plant put into service May 9, 1955. See report for year ending June 30, 1955.

The box spreader is used only in narrow streets, steep hills, yards, etc., where the use of the mechanical spreader is not practical. Hand resurfacing is done only in small, irregular areas or where use of the mechanical or box spreader would cause excessive interference with traffic.

Resurfacing being the major function of the bureau, accounting for the expenditure of more than twenty percent of street repair funds, major attention has been given to ways and means of reducing its cost. Further improvement can be made but, despite continually rising labor and material costs, the overall average cost has been reduced from 6.3 cents per square foot in 1952-53 to 5.9 cents per square foot in 1960-61.

Part of the cost reduction was made possible by increased plant output and improved materials delivery facilities. However, a substantial portion was achieved by reducing the thickness of the mat placed. The average coverage has been increased from about 150 square feet per ton in 1952-53 to nearly 170 square feet per ton in 1960-61.

Decrease in slab thickness has been achieved without the use of the pneumatic tired roller mentioned in report for year ending June 30, 1958. It was found that the pneumatic tired roller could not be used until resurfacing material was relatively cool, thus delaying operations. It appears that compaction supplied by steel tired roller and normal traffic is sufficient.

In report for year ending June 30, 1957 it was stated that "during the year it was discovered that heater-planing the gutter, after resurfacing is feather edged some distance from the curb, provides considerable improvement" and "it appears that the latter treatment followed by the application of a slurry seal will produce acceptable results at moderate cost."

Slurry sealing is inferior to resurfacing and must be kept free from traffic for several hours. The saving in cost does not appear to warrant its use. Until a better method is found, shallow gutters will be heater-planted before a street is resurfaced and resurfacing will extend from curb to curb. There will be exceptions where only the gutters will be heater-planed and resurfaced.

Resurfacing crews and assignments of individuals are as shown below:

	Machine	Box	Hand	
Chauffeurs	1	1	1	Hauling crew and tools
	3 to 6	2 to 4	2	Hauling material
Engineers	2	1	1	Operating power rollers
	1			Operating paving machine
Asphalt Workers	1	1		Tending screed, dumping trucks
	2	2	3	Shovelling material
	1	1	1	Applying tack coat
	1			Tending barricades
Asphalt Finishers	2	3	2	Raking
	1	1	1	Ironing
	1			Tending traffic
Foreman	1	1		Directing crew and operations
			1	Raking and directing crew

Machine and box resurfacing crews are somewhat larger than similar crews used by private contractors. Replacement of absentees is difficult under existing rules and regulations; crews are often at less than full strength. Work is usually performed at two or more locations during the day; one or more men must be sent ahead to prepare the next job. Job sites are cleaned up as work progresses.

Resurfacing material is a hot plant mix composed of 6% of 60-70 penetration paving grade asphalt, fine graded sand, coarse graded sand and gravel graded to a maximum size of five-eighths inch. See "Topeka" mix under Municipal Asphalt Plant.

EQUIPMENT

With the exception of two minor items, equipment procured during the year consisted of replacements for worn out units. Replacement units were as follows:

1 - Austin-Western, Model 110, 5-ton crane

1 - Littleford, Model 93-OB, 200-gallon emulsion distributor

1 - Gradner-Denver, Model B87B, pavement breaker

3 - Rola-Burner, Model M-165, LP G fired hand rollers

1 - LeRoi, Model 125-G1A, 125 cfm compressor

2 - Smith, Model 75-8, 75 cfm compressors

3 - International, Model BCF182, dump trucks

1 - Ford, Model F600, dump and compressor truck

2 - Rambler American business coupes

Except as noted below, replacement units are quite similar to the units replaced.

Purchase of the crane presented quite a problem. None could be found that could be considered ideal for the Bureau's need. The Austin-Western is a considerable departure from the 1949 Hughes-Keenan 2-ton unit in use for the past several years. However, after extensive study, it was determined to be the most suitable available for the price quoted in response to a call for proposals and bids.

The liquid petroleum gas-fire hand rollers will replace conventional wood and coal-fired hand rollers during cold weather and, possibly, for the major part of all asphaltic pavement patching. The new rollers are equipped with fore-mounted hoods and burners that can be used to preheat areas of asphaltic pavement to be patched. Preheating will prevent the sudden chilling of patching material and thereby eliminate or at least reduce the ravelling that often occurs on this account.

Hood and burners can also be used to heat asphaltic pavement so that humps and ridges can be removed by raking. During tests, the new unit did not receive the enthusiastic approval of the workmen as a roller but it is believed that the cleaner, lighter and, if properly used, safer unit will soon gain favor.

The three International dump trucks are equipped with workmen's compartments and will be used by cleanup crews. They are similar to the units replaced except that they are three-axle, instead of two-axle, "snub nose" chassis with low mounted bodies. The three-axle chassis permit the legal carrying of normal loads on State highways and freeways. The "snub nose" permits shortest wheelbase with reasonable truck proportions. Low mounting of the body facilitates hand loading. Although new bodies have a greater capacity the loading height is about three inches less than for the replaced units.

BRIDGES AND TUNNELS

The City's three bascule type bridges and their operation were described in report for year ending June 30, 1960; Broadway Tunnel and its operation was described in report for year ending June 30, 1959. Extensive alterations were made to the Islais Creek Bridge by contract under the Bureau of Engineering. This bridge was out of service from March 13, 1961 to April 1, 1961 on this account.

Bridge openings during the past year and the previous five years were as follows:

Year	Third Street	Fourth Street	Islais Creek
1960-61	1503	1102	962
1959-60	1008	573	762
1958-59	1203	757	1084
1957-58	1322	909	1492
1956-57	1185	629	1453
1955-56	800	290	1338

The increase in the number of openings of the Third Street and Fourth Street bridges is attributable to the passing of boats previously berthed in Islais Creek but moved because of a building program at the latter location begun in October 1960. The increase in the number of openings of Islais Creek Bridge occurred during the months of August-October, 1960 and is attributable to dredging and the passing of an extraordinary number of fishing boats.

Statistics regarding Broadway Tunnel ventilation, lighting and traffic are as follows:

Ventilation - Blower Operating Time

Year Ending June 30	North Bore - Westbound Traffic				South Bore - Eastbound Traffic			
	Slow		Fast		Slow		Fast	
	Hours	Percent	Hours	Percent	Hours	Percent	Hours	Percent
1961	423.7	4.83	10.8	.12	51.7	.59	36.0	.41
1960	200.1	2.28	5.9	.07	32.2	.37	26.2	.30
1959	228.5	2.61	5.6	.06	39.3	.45	33.9	.39
1958	291.6	3.33	10.0	.11	37.7	.43	23.6	.27
1957	322.4	3.68	7.8	.09	37.2	.42	26.3	.30
1956	585.7	6.67	12.7	.14	31.6	.36	20.3	.23

Lighting - Lamps Replaced

	Occasions	72T8's	72T12's	Total
Lamps in Service		1004	332	1336
Replaced During Year	3	279	67	346
Previously Replaced	38	4020	257	4277
Totals	41	4299	324	4623

Traffic Counts

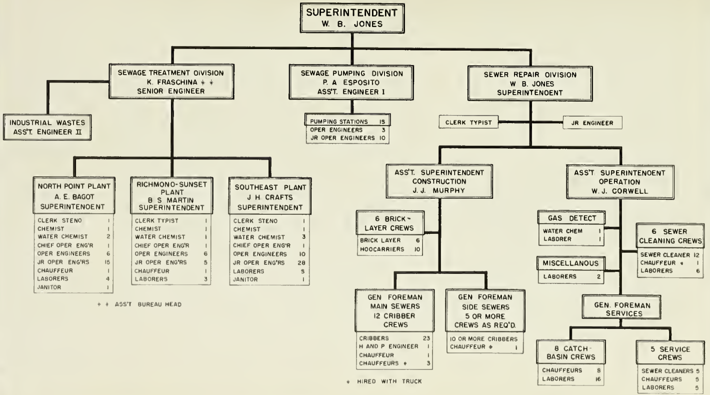
		Eastbound	Westbound
Tuesday	December 15, 1959	12,216	10,359
Thursday	July 10, 1958	11,144	9,478
Wednesday	March 16, 1955	10,607	9,795
Monday	August 17, 1953	9,361	8,878
Wednesday	February 11, 1953	8,668	8,770

The tunnel was put into service in December 1952.

ORGANIZATION CHART

BUREAU OF SEWER REPAIR AND SEWAGE TREATMENT

CITY AND COUNTY OF SAN FRANCISCO
JUNE 30, 1961



BUREAU OF SEWER REPAIR AND SEWAGE TREATMENT

W. B. Jones, Superintendent

The Bureau of Sewer Repair and Sewage Treatment is responsible for the maintenance and operation of the City's sewerage system including main sewers and interceptors, pumping stations, treatment plants and outfalls. It is divided into 3 divisions: Sewer Repair, Sewage and Waste Treatment, and Sewage Pumping. The Sewer Repair Division maintains and repairs public sewers and appurtenant structures and services, mosquito complaints originating in drainage catchbasins. The Sewage and Waste Treatment Division operates and maintains three primary sewage treatment plants, conducts sanitary surveys on shore wastes, regulates and controls industrial wastes discharges to sewers, analyzes air samples for pollutants and advises other City departments on the maintenance and operation of their sewage treatment facilities. The Sewage Pumping Division operates and maintains 15 sewage pumping stations.

One additional Junior Operating Engineer was employed during the year by the Pumping Station Division because of the completion of the new Fourth Street Station. Thus the budgeted employments in this division is increased to 14. Employments in the other divisions remained at 106 for Sewage Treatment and 108 for Sewer Repair. Thus this total for this Bureau is 228. These employments are supplemented by one Junior Engineer and one Clerk-Typist for Sewer Repair and 9 maintenance personnel for Sewage Treatment, all from other bureaus and departments and 5 chauffeurs hired with their trucks on a contractual basis by Sewer Repair. In addition, the Sewer Repair Division has a varying number of non-budgeted employments (20 are authorized) who perform new construction and repairs in connection with side sewers and who are paid by assessments against affected property owners. Thus there are a maximum of 264 employments under the control of the Bureau. Actually, there are normally from 6 to 10 less than this because of the varying side sewer employments which depend upon activity in the building industry.

The accompanying chart shows the organization of the Bureau by major functions and personnel. It also shows the names of those holding administrative positions.

The budget expenditure for the fiscal year totalled $2,191,705 of which $1,099,961 was for treatment plants and industrial wastes control, $124,858 was for pumping stations and $966,886 sewer maintenance and repair activities. In addition, the Sewer Repair Division expended $173,176 for side sewers paid for by property owners and $2,932 on work orders from other departments.

	Sewage Treatment	Sewage Pumping	Sewer Repair
PERSONAL SERVICES			
Permanent Salaries*	$ 585,380	$ 85,763	$ 70,070
Overtime*	4,243	111	1,216
Holidays*	17,366	4,020	783
Temporary Salaries*	14,710	1,786	
Wages (Per Diem)	104,168		710,225
Sub-total	$ 725,867	$ 91,680	$782,294
CONTRACTUAL SERVICES			
Power and Gas	127,327	22,953	
Plant Equipment	61,720	4,369	
Field Equipment	2,722	56	28,909
Landscape Maintenance	14,283		
Miscellaneous Services	1,640	981	9,623
Hired Trucks			44,190
Sub-total	$ 207,692	$ 28,359	$ 82,722
MATERIALS AND SUPPLIES			
Replacement Parts	28,610	585	846
Field	808		42,453
Plant	18,165	2,017	
Fuels and Lubricants	2,755	369	12,709
Treatment Chemicals	111,513		
Sub-total	$ 161,851	$ 2,971	$ 56,008
EQUIPMENT			
New	806	1,848	6,835
Replacement	3,745		39,027
Sub-total	$ 4,551	$ 1,848	$ 45,862
TOTAL	$1,099,961	$124,858	$966,886

* - For Monthly Employees

The winter of 1960-61, like those of the previous two years, was marked by unusually light rainfall. Therefore, there were relatively few serious sewer breaks during the year. It may be anticipated that the first period of heavy rainfall will bring with it a series of major washouts. It is hoped that serious property damage or personal injury will not result. The Bureau has for several years, requested budgeted funds to hire a crew consisting of a sewer cleaner and a laborer who would divide their time between mosquito abatement and sewer inspection. Budget processing agencies have not seen fit to allow this item. Such a crew would be invaluable for inspecting sewers in the hope of locating washouts before actual street cave-ins.

On four occasions during the year it became necessary to declare emergencies to enable the Bureau to complete the repair of broken sewers. The emergencies became necessary when it appeared that it would be impossible to complete the repairs at a cost within the $2000 Charter limitation. It is not practical to have such repair work done by contract since it is usually not possible to tell what is to be done until the street has been opened up and usually an unsanitary condition exists which does not allow time for contract procedures. This $2000 Charter limitation was established many years ago when cost indexes were much lower than at present. It would seem that an upward revision of the limit should be in order.

Simple explosive gas testing equipment has been provided for each crew that has occasion to enter sewers in the course of their work. These workmen have located a number of dangerous situations and the safety standards of the Bureau have thereby improved. This program is under the direction of the Gas Detection Unit which is required to devote considerable time to seeing that the instruments are in good condition and are properly used. The tests made by the workmen in the field are not a matter of record. Thus, while the records indicate a considerable reduction in the number of gas tests performed, the actual numer of tests performed has been greatly increased.

SEWAGE AND WASTE TREATMENT DIVISION

GENERAL

The Sewage and Waste Treatment Division operates the North Point, Richmond-Sunset and Southeast Sewage Treatment Plants, controls discharge of industrial wastes, and gives advice on operation of sewage treatment facilities under jurisdiction of other City Departments.

The three plants operated continuously during the year, except for limited shutdowns for planned repairs. The Fourth Street pumping station was placed in operation during February 1961 adding 29 acres of tributary area to the North Point Plant. The present flow from this source is under 0.1 million gallons daily. Areas still discharging untreated sewage to the bay will be connected to the plants on completion of connecting sewers and pumping stations now under construction or planned.

The secondary digester at the Richmond-Sunset plant was taken out of service in November 1960 to repair internal piping. After emptying the digester, it was found that the protective coating on the underside of the floating cover had failed in many places and a number of tie rods reinforcing the cover were broken. The tie rods were repaired by the end of the fiscal year and repainting will be completed early in the next fiscal year.

Availability of greater maintenance funds this year has allowed improved machinery maintenance, especially at the Southeast plant, and a reduction in the backlog of maintenance work still to be done.

The Bureau of Engineering performs engineering design for improvements. Major repairs and maintenance requiring the services of specialized crafts are done by other Department bureaus and by the Purchaser's shops. The Park and Recreation Department maintains landscaping at all plants.

SEWAGE TREATMENT METHODS

At each plant sewage is treated for removal of oil, grease, floating material, grit and resettleable solids. Grit from all plants and screenings from the North Point and Southeast plants are hauled by truck to the garbage fill south of the county line. Screenings at the Richmond-Sunset plant are incinerated and sludge is digested in two-stage digestion, elutriated, and dewatered by vacuum filtration. Filter cake is hauled to City parks for use as a soil conditioner. Raw sludge from the North Point plant is pumped to the Southeast plant where it is treated together with raw sludge from the Southeast plant. Treatment consists of thickening, two-stage digestion, elutriation, vacuum filtration and flash drying. A small quantity of the dried sludge is used as a soil conditioner by other City departments, and the balance is sold under contract.

TREATMENT PLANT OPERATION

The following table summarizes data on flows, material removed, chemicals added and products handled, and power and gas purchased for the three plants.

	North Point	Richmond-Sunset	Southeast
Sewage Flow, million gallons			
Total	17080 (a)	5798	6060
Avg day	46.8	15.9	16.6
Avg day, dry weather (b)	44.8	15.7	15.8
Max day, wet weather	90.3	21.3 (c)	27.4(c)
Max day, dry weather	50.4	20.0	21.8
Max rate, wet weather	106	30 (c)	44 (c)
Max rate, dry weather	73	29	29 (d)
Screenings, cu ft			
Total	34765	10246	35580
Max day	416	74	224
Per million gallons	2.0	1.8	5.9
Grit, cu ft			
Total	58480	25330	46820
Max day	555	350	215
Per million gallons	3.4	4.4	7.7
Chlorination, lb (e)			
Pre	497870	24920	66830
Post	976130	371180	
Process water (effluent)	10720		
Total	1484720	396100	66830
mg per liter dry weather	13.0	8.5	14.9
Sludge Solids, M lb (dry)			
From sedimentation	24176		22686 (f)
To digesters (g)		6832	33556
Filter Cake		1009	13495
Dried sludge			10081 (h)
Ferric Chloride			
Total, lb		39360	756460
% Filter cake solids		3.90	5.61
Gas Production, M cu ft			
Total		32632	214624
Avg day		89	588
Power and Gas Purchased			
Power, total M kwh	5457.6	1879.2	5094.0
Power, avg/mo, M kwh	454.8	156.6	424.5
Natural gas, total C cu ft	79694	44584	83265
Natural gas, avg/mo, C cu ft	6641	3712	6939

	North Point	Richmond-Sunset	Southeast
Hauling			
Trips, grit and screenings	607		265
Trips, grit and filter cake		582	
Trips, dried sludge			165 (i)

NOTES:

(a) For 364.8 days at North Point Plant.

(b) Excluding days with .01 inch or more rain and dry days following days with .05 inch or more rain.

(c) Flow restricted during storms to avoid overloading grit handling facilities.

(d) Estimated; throttling of head gate obscures true flow.

(e) North Point: prechlorination continuous; postchlorination continuous March through November and during extended dry weather periods in winter months. Richmond-Sunset: prechlorination limited to 89 days and postchlorination to 296 days because of operational difficulties with chlorinators. Southeast: prechlorination for 33 days at varying dosages; discontinued after August 29 because of high chlorine demand and insufficient funds.

(f) Includes recirculating load from raw sludge thickening and digested sludge elutriation overflows; reduced from 1959-60 by better control of solids in overflow.

(g) From raw sludge thickening.

(h) Moisture free basis; figure in previous years included residual moisture left after drying process.

(i) Hauling 725.7 tons used by City. Contractor hauled 5095.0 tons sold to him at $1.10 per ton. Weights include residual moisture.

COST OF OPERATION

Total expenditure of the fiscal year was $1,099,961. The cost was distributed as follows:

Personal Services	$725,867
Heat, Light and Power	127,327
Other Contractual Services	80,365
Materials and Supplies	161,851
Equipment	4,551

Based on an estimated contributory population of 770,000 the cost of operation was approximately $1.43 per capita.

MAJOR MAINTENANCE

NORTH POINT PLANT:

Reconstruction of "B", "C", and "D" lift pump motors to correct failure to reach synchronous speed.

RICHMOND-SUNSET PLANT:

Repairing roofs of Administration Building, Pretreatment Building, and Coil Storage Shed.

Replacement of broken reinforcing tie rods for floating cover and repairing sludge withdrawal piping in secondary digester.

SOUTHEAST PLANT:

Reconditioning two 7,000 gpm lift pumps and two 825 gpm scum pumps.

Overhauling two main vacuum pumps for vacuum filters.

SPECIAL STUDIES AND INVESTIGATIONS

1. Completed:

   Means of decreasing elutriation tank overflow.

2. Continuing:

Indentification of source in leak and seepage complaints.

Sanitary survey of shore waters.

Chlorine demand of sewage at off hours.

Effect of mechanical flocculation on sedimentation.

Correction of grease deposition in Fisherman's Wharf sewers.

Air pollution level at ocean beach.

INDUSTRIAL WASTES

After a lapse of over two years following the death of the engineer in charge of industrial wastes control, a replacement was certified for this position in May, 1961. Thus this important program is being revitalized.

SEWAGE PUMPING STATIONS

GENERAL

The Sewage Pumping Division operates and maintains 15 sewage pumping stations which are divided into 3 districts corresponding to the tributary districts of the North Point, Richmond-Sunset and Southeast Treatment Plants. Their primary purpose is to prevent pollution of recreational beaches and shore waters by intercepting and boosting sanitary flow from low-lying areas of the City into main interceptors leading to the treatment plants.

One new station was put into operation during the year, the Fourth Street Station. As of June 30, this station was pumping only a relatively small flow due to the fact that some of the diversion works which will flow to the station are still incomplete.

These stations are generally designed and constructed for capacities sufficient to handle all sanitary sewage and in addition, to take care of a rainstorm of 0.02 inches per hour. All stations, with one exception, are provided with overflow spillways so that run-off beyond the capacity of the stations is discharged into the ocean or bay. In most cases, the stations have sufficient capacities so that one pumping unit can be shut down for repairs during the dry season. Pumping equipment for each station is electrically operated by line starters energized by a combination of float switches which are activated by the periodic (or abnormal) rise and fall of the sump liquid level. One station, (Commercial Street), has a gasoline engine driven standby pump.

All stations except 3 are unattended. Operators are on duty from 8 a.m. to midnight at the Commercial Street and Marina Stations. At Sea Cliff No. 2, an operator is on duty from 8 a.m. to 4 p.m. These shifts are required to assure continued operation and to prevent flooding of basements in the downtown business area and pollution of recreation beaches and shore waters in the Yacht Harbor, Aquatic Park and Phelan Beach areas.

During the fiscal year, one Junior Operating Engineer was added to the personnel because of the completion of the Fourth Street Pumping Station.

Occurrences of major interest at the various pumping stations during the fiscal year were as follows:

Fitzgerald
The capacity of this station was increased from 0.6 m.g.d. to 1.3 m.g.d by replacing the 6-inch diameter force main with one of 8-inch diameter, and by replacing the pumps with others of larger capacity.

Marina
Badly corroded hydraulic control lines were replaced with polyvinyl chloride pipe.

Sea Cliff No. 1
The pumps were altered in such a manner that each of the two pumps would have a separate bed plate. This enables repairs to be made to one pump without interrupting the operation of the other.

Yosemite
Large quantities of sand entering the sump constitute a severe problem. The cost in manpower, equipment and materials for the removal of this sand has been unusually heavy. An attempt was made to remove the sand by means of a rented submersible contractor's type sump pump. The attempt was moderately successful and while the cost in manpower for sand removal was still high, there was considerable improvement as compared to the older methods.

The State Department of Public Health is requiring that the water supply systems in the pumping stations be brought up to health standards by eliminating possible cross connections. The necessary alterations have been completed at Fulton Street, Park Merced and Sea Cliff No. 2 and corrections are under way at Commercial Street and Hyde Street.

TABLE I

SEWAGE PUMPING STATIONS

Location	Drainage Area in Acres	Million Gallons Pumped	Expenditures						Unit Cost Per M.G. Pumped for					
				Contractual						Contractual				
			Salaries	Mainten-ance	Heat Light & Power	Materials & Supplies	Equip-ment	Totals	Salarias	Maintan-anca	Heet Light & Power	Materials & Supplies	Equip-ment	Totals
Generel			$ 5,169	$ 13	$	$ 74	247	$ 5,503	$ 1.08	$ --	$ --	$ .02	$ .05	$ 1.15
Commercial St.	93	324	20,632	576	1,319	503		23,030	63.67	1.77	4.07	1.55		71.06
Fitzgerald Ave.	30	36	367	12	332	63		774	10.19	.36	9.22	1.75		21.52
Fulton Street	82	63	1,411	15	777	44		2,247	22.39	.24	12.33	.70		35.66
Hunters Point	90	120	1,890	27	972	66		2,955	15.75	.23	8.10	.55		24.63
Hyde Street	14	24	401	248	190	11		850	16.70	10.33	7.91	.45		35.39
Lakeshore	152	141	3,990	59	1,564	30		5,643	28.30	.42	11.09	.22		40.03
Marina	1125	2,239	25,556	3,019	6,778	880		36,233	11.41	1.35	3.03	.39		16.19
Mariposa St.	117	234	3,900	56	1,480	152		5,588	16.66	.24	6.32	.65		23.87
Park Merced	212	270	6,685	151	3,331	225		10,392	24.76	.56	12.33	.83		38.48
Pineleke	3	4	261	8	193	34		496	65.25	2.00	48.25	8.50		124.00
Sea Cliff #1	4	3	517	132	46	31		726	172.33	44.00	15.33	10.33		241.99
Sea Cliff #2	83	104	5,165	533	1,533	135		7,366	49.66	5.13	14.74	1.29		70.82
Vicente St.	52	72	2,630	22	736	45		3,433	36.53	.31	10.22	.62		47.68
Yosemite	527	976	11,606	235	3,129	453		15,423	11.89	.24	3.21	.48		15.82
Fourth Street	138	187	1,500	300	573	225	1,601	4,199	8.02	1.60	3.06	1.20	8.56	22.44
Totals	2,722	4,797	91,680	5,406	22,953	2,971	1,848	124,858	19.11	1.13	4.79	.62	.39	26.04

SEWER REPAIR DIVISION

The Sewer Repair Division cleans, repairs, maintains and makes minor additions to the various components of the sewerage system including main sewers, side sewers and appurtenant structures. The Division also tests for explosive and other gasses which may be found in the sewer system.

In order to organize the work, the personnel are divided into units or working groups consisting of sewer cleaning units, eductor units, service units, main pipe sewer units, bricklayer units, side sewer units, gas detection unit, material trucks, digging unit and compressor unit. While many of these groups frequently assist each other, the latter three may be considered almost entirely subsidiary in that their principal function is to assist other units in the performance of their work.

SEWER CLEANING

Sewer cleaning units clean main sewers, pumps and tanks at pumping stations and treatment plants, do miscellaneous work in connection with sewers and handle complaints occasioned by storms when service crews cannot handle all calls.

Sewers are normally cleaned by buckets dragged between manholes. Other methods used are flushing and rodding of pipe sewers and manual cleaning of large sewers.

There are 6 sewer cleaning units, each consisting of 2 sewer cleaners and one laborer equipped with a specially designed truck containing the necessary equipment such as hoses, hand tools, buckets, cable and power hoists. One of the older truck units was replaced by a new one during the year. While the new one operates on the same basic principle as the old, there are a number of design changes. The older units were, for the most part, built in the City's shops. The new unit is designed to utilize, as far as possible, commercially available components. The new unit has proven successful and it is planned to replace all units with similar equipment as the old ones wear out.

The principal activities of these units during the year were in the Western Addition, Mission and Richmond districts. Certain specific areas continued to give trouble. These trouble spots include Fisherman's Wharf, Islais Creek and the lower Financial or "Commission" District.

EDUCTOR OPERATIONS

An eductor unit consists of a truck mounted Elgin eductor with a gasoline powered pump and tank manned by a chauffeur and 2 laborers. Its principal function is the cleaning of catchbasins, but being a very versatile unit, it is put to many other uses where a source of water is needed to where pumping is required.

There are normally 8 eductor units operating with 2 additional machines for standby. One of the older units was replaced with a new one during the year. The new machine, like the previous 2 which were purchased, is of the double reel type. This type is preferable because of the increasing number of one-way streets on which these units operate. The truck chassis for the new unit is of cab-over engine type. This feature is desirable for this service because the shorter overall length enables the unit to operate more effectively under conditions of heavy traffic.

SERVICE UNITS

Service units service complaints from the public and other sources, wet down main and side sewer backfills, flush sluggish or temporarily clogged pipe sewers, establish the necessity for specialized work by other crews and do miscellaneous emergency work.

Each of the 5 crews consists of one sewer cleaner, one chaueffeur and one laborer and uses a one-ton truck with a special utility body equipped with hoses, lights, barricades and other tools and equipment.

Four of the crews are on regular day work and the fifth unit works evenings from 4 p.m. to midnight. No weekend work is scheduled.

Service crews spent 55.5% of their time on service calls and 44.5% on other work. During the fiscal year a total of 12,105 calls were made, 6,483 on complaints and 5,622 on other work.

The following tabulation shows the breakdown of work done by type of work and number and precent of calls.

	Calls			
Type of Work	Number		Percent	
Side Sewer				
Relieved clogged sewer	2832		23.4	
Found trouble inside property	260		2.2	
Wet down construction backfill	306		2.5	
Determine if side sewer exists	256		2.1	
Found side sewer broken	243	3897	2.0	32.2
Main Sewer				
Found main sewer broken	484		4.0	
Relieved clogged sewer	652		5.4	
Examined condition	468		3.9	
Wet down construction backfill	297	1901	2.4	15.7
Catchbasins and Manholes				
Remove obstruction	453		3.8	
Replace cover	317		2.6	
Silence noisy cover	327		2.7	
Examine condition	187	1284	1.5	10.6
Miscellaneous				
Service lights and barricades	981		8.1	
Investigate seepage and leaks	610		5.0	
Clean at pump stations	470		3.9	
Deliver materials to job	221		1.8	
Remove deposits on sidewalk	97		0.8	
Mosquitoes	2356		19.5	
Not classified	288	5023	2.4	41.5
Total		12105		100.0

MAIN PIPE SEWERS

Cribbing crews excavate, lay and backfill main sewer trenches, lay pipe in the 6 and 8-inch sizes, excavate, lag and backfill for structure repairs, cut pavement and do miscellaneous work. When conditions are right these crews are frequently assisted by the digging unit.

There are normally 11 cribbing crews consisting of 2 cribbers each although this arrangement is subject to some variation to suit conditions. One of the crews is assigned to the compressor unit and thus spends most of its time cutting pavement for the other crews.

During the year, 7458 linear feet of sewer were repaired or replaced at 463 locations. This represents a small increase in activity as compared to the previous year.

BRICKLAYER WORK

Bricklayer crews repair main brick and concrete sewers, construct and repair manholes and catchbasins, lay sewer pipe and do miscellaneous brickwork when required.

There are 2 types of bricklayer crews, top crews and underground crews. A top crew consists of a bricklayer and a hodcarrier equipped with a $1\frac{1}{2}$ ton truck. Their functions are to repair catchbasins and manholes, lay pipe in trenches and do miscellaneous brickwork. An underground crew consists of a bricklayer and 2 hodcarriers equipped with a trailer-mounted tool box. Their function is the repair of large brick and concrete sewers which can be worked on from inside the sewers.

SIDE SEWERS

Side sewer crews excavate, lag and backfill sewer trenches and lay sewer pipe. Two cribbers normally constitute a crew and the number of crews varies with the demand for this type of work which is dependent upon activity in the building industry. Two of the crews are motorized and carry sufficient tools, equipment and materials to complete a job and move without delay. Non-motorized crews are equipped with trailer-mounted tool boxes and must be moved by the hired trucks.

Since side sewers belong to the fronting property owners, all side sewer construction and repair is at the property owner's expense. All such work is done by this bureau except where side sewer construction is included with main sewer construction under public contract. During the year 374 side sewers were installed, 157 side sewers were repaired and 23 connections were made. It will be noted that the number of repair jobs remained about the same as in the previous year, the amount of new work was about 20% less. This was the result of reduced activity in the building industry.

GAS DETECTION

The primary function of the gas detection unit is to conduct a continuing City-wide testing and inspection survey of the sewerage system. Tests for explosive and toxic gasses are made at sewer manholes and at special locations such as pumping stations and sewage treatment plants. The gas most frequently detected is methane which usually results from leakage in gas mains and services.

Early in the fiscal year simple explosive gas detection equipment was issued to each crew which has occasion to enter sewers. At the same time, instructions were issued on the use of this equipment. The gas detection unit is in charge of this program and it is its duty to see that the workmen are properly instructed and use the instruments correctly. As a result, the number of manholes tested by the unit has decreased but the total amount of manhole testing has greatly increased.

The Gas Detection Unit also assists actively in the maintenance of safety standards in connection with all work in the Sewer Repair Division.

The unit is also in charge of the photographing of the interior of sewers. During the year, 16,871 feet of main sewer were photographed. These photographs have proved invaluable in establishing the condition of sewers. In at least one case, an incipient wash-out was discovered through the photographs which, if allowed to progress, could have caused considerable property damage and even personal injury.

MATERIAL TRUCKS

Five trucks together with their drivers are hired on a contractual basis to assist in the work of the Division. These trucks haul materials and equipment to jobs, remove waste material to dumps and move non-motorized units from one location to another. One of these trucks is assigned the duty of visiting all jobs on Saturdays, Sundays and holidays and seeing that all lamps and barricades are in proper order.

DIGGING UNIT

This unit consists of a combination front-end loader and back-hoe which is manned by an engineer of hoisting and portable engines. This unit assists in any excavation work where the danger of damage to other utilities is not excessive.

COMPRESSOR UNIT

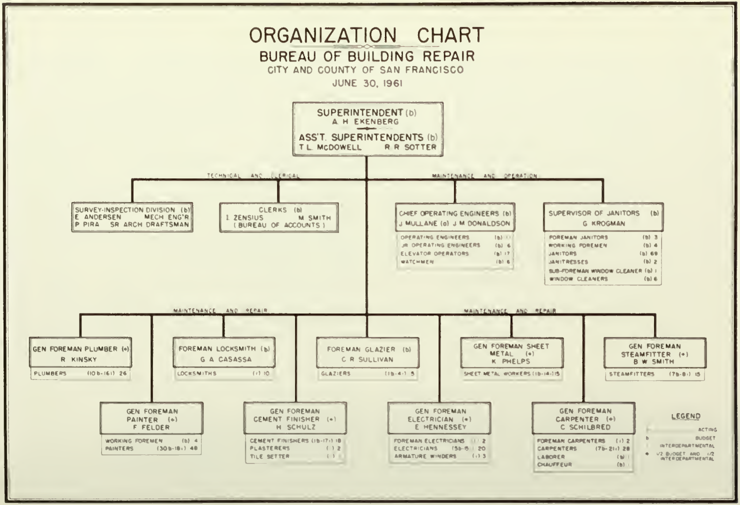
The compressor unit consists of a truck mounted compressor together with its tools manned by 2 cribbers and a chauffeur. It is used to assist other groups, principally main sewer crews, in opening streets for excavation.

TABLE II

SHOWING WORK DISTRIBUTION & COST -- SEWER REPAIR DIVISION

Work Unit		Per-cent			Totals		Cost per Unit
1	Sewer Cleaning	92.5	Cleaning Sewers	105,775		384,935 Lin.Ft. cleaned	.27
		7.5	Other Work	8,641	114,416		
2	Eductor Operations	66.7	Cleaning Catchbasins	91,688		15,819 Basins cleaned	5.80
		33.3	Other Work	45,695	137,383		
3	Servicing	55.5	Servicing Complaints	58,877		6,483 Complaints	9.08
		44.5	Other Work	47,329	106,206		
4	Main Pipe Sewer Repairs	100.	Repairing Pipe Sewers	189,178	189,178	7,458 Lin.Ft. at 463 Locations	25.37
5	Brickwork	63.8	Repairing Brick Sewers	80,621		16,450 Lin.Ft. Repaired	4.90
		4.5	Building Catchbasins	5,771		8 Catchbesins Built	721.34
		7.2	Building Manholes	9,006		15 Manholes Built	600.43
		9.7	Repair Catchbesins	12,430		470 Catchbasins Repaired	26.45
		14.0	Repair Manholes	17,553		620 Manholes Repaired	28.31
		0.8	Repair Concrete Sewers	1,047	126,428	3 Locations	349.05
6	Side Sewer Work	74.7	Installations	118,297		374 Installations	316.30
		24.2	Repairs	38,405		157 Repairs	244.62
		1.1	Connections	1,773	158,475	23 Connections	77.09
7	Ges Detection	28.8	Testing Manholes	3,691		3,042 Manholes Tested	1.21
		71.2	Other Work	9,120	12,811		
8	Work Orders			2,511	2,511	Not Applicable	
9	Miscellaneous			42,243	42,243	Not Applicable	
	Total Not Including Work Unit 6			731,176			
	Totel For Work Unit 6			158,475			
	GRAND TOTAL				889,651		

NOTE: The costs tabulated here do not include overhead or other indirect charges.


ORGANIZATION CHART
BUREAU OF BUILDING REPAIR
CITY AND COUNTY OF SAN FRANCISCO
JUNE 30, 1961
SUPERINTENDENT (b)
A H EKENBERG
ASS'T. SUPERINTENDENTS (b)
T L. McDOWELL R R SOTTER
TECHNICAL AND CLERICAL
MAINTENANCE AND OPERATION
SURVEY-INSPECTION DIVISION (b)
E ANDERSEN MECH ENG'R
P PIRA SR ARCH DRAFTSMAN
CLERKS (b)
I ZENSIUS M SMITH
(BUREAU OF ACCOUNTS)
CHIEF OPERATING ENGINEERS (b)
J MULLANE (a) J M DONALDSON
OPERATING ENGINEERS (b) 11
JR OPERATING ENGINEERS (b) 6
ELEVATOR OPERATORS (b) 17
WATCHMEN (b) 6
SUPERVISOR OF JANITORS (b)
G KROGMAN
FOREMAN JANITORS (b) 3
WORKING FOREMEN (b) 4
JANITORS (b) 69
JANITRESSES (b) 2
SUB-FOREMAN WINDOW CLEANER (b) 1
WINDOW CLEANERS (b) 6
MAINTENANCE AND REPAIR
MAINTENANCE AND REPAIR
GEN FOREMAN PLUMBER (•)
R KINSKY
PLUMBERS (10b-16i) 26
GEN FOREMAN
PAINTER (•)
F FELDER
WORKING FOREMEN (b) 4
PAINTERS (30b-18i) 48
FOREMAN LOCKSMITH (b)
G A CASASSA
LOCKSMITHS (i) 10
GEN FOREMAN
CEMENT FINISHER (•)
H SCHULZ
CEMENT FINISHERS (1b-17i) 18
PLASTERERS (i) 2
TILE SETTER (i) 1
FOREMAN GLAZIER (b)
C R SULLIVAN
GLAZIERS (1b-4i) 5
GEN FOREMAN
ELECTRICIAN (•)
E HENNESSEY
FOREMAN ELECTRICIANS (i) 2
ELECTRICIANS (5b-15i) 20
ARMATURE WINDERS (i) 3
GEN FOREMAN SHEET
METAL (•)
K PHELPS
SHEET METAL WORKERS (1b-14i) 15
GEN FOREMAN
CARPENTER (•)
C SCHILBRED
FOREMAN CARPENTERS (i) 2
CARPENTERS (7b-21i) 28
LABORER (b) 1
CHAUFFEUR (b) 1
GEN FOREMAN
STEAMFITTER (•)
B W SMITH
STEAMFITTERS (7b-8i) 15
LEGEND
a ACTING
b BUDGET
i INTERDEPARTMENTAL
• 1/2 BUDGET AND 1/2 INTERDEPARTMENTAL

BUREAU OF BUILDING REPAIR

A. H. Ekenberg, Superintendent

This Bureau is, as the name implies, that division of the Department of Public Works Maintenance and Operation activities which deals primarily with our public buildings. The scope of Bureau responsibilities is wide and varied, but of primary importance is the providing of services and materials for the maintenance, repair, replacement and reconstruction of the 321 City and County buildings which have been established by Charter authority or other policy determinations as being the responsibility of the Department of Public Works. While the above is the primary function, the following are the secondary Bureau activities, in relative order of importance and/or dollar value:

1. Provide operation and custodial personnel and supplies for 35 of the above buildings, requiring the full time services of 122 employees.

2. Provide necessary maintenance and repair services to other City departments through an interdepartmental work order procedure, or by competitive public contract. Relative importance and proportions of this phase of Bureau activities is illustrated graphically in Figure 1. The major portion of this work will be noted as being derived from the Board of Education, with other City departments accounting for lesser amounts.

3. Budget for and provide labor, materials, supplies and contractual services for street traffic painting. The units of work performed and the unit costs thereof are shown on Table 2.

4. Provide inspection and survey services necessary for the development of a preventive maintenance program, and the compilation of data and material for the intelligent preparation of budgets. In addition, providing technical consultation and assistance to the operating activities in the appropriate maintenance and repair of properties.

5. Maintenance and repair of street name signs.

6. Repair of street structures and sidewalks fronting on City property, and of various monuments in street areas.

ORGANIZATION AND PERSONNEL

The organization chart included as a part of this report indicates the primary divisions within the Bureau, and their function as regards maintenance and repair, and maintenance and operation, in addition to the technical and engineering division providing survey and inspection services. Division, shop, or craft heads are shown therein as of June 30, 1961. In addition, the chart indicates the budgeted as contrasted with the interdepartmental positions.

Personnel of the administrative, technical and operational divisions consists entirely of budgeted employees, as does the clerical staff assigned to this Bureau from the Bureau of Accounts.

In the maintenance and repair or shop divisions, however, the majority of employments are enumerated as interdepartmental, and are not established as continuing positions, but only "as needed" when the services are required and the funds are provided. The major portions of these interdepartmental employments have been derived from school funds during preceding years. Of the budgeted shop employees, most are on assignment to various major public buildings. Such assignments, however, are not inflexible, and are subject to call as necessary when the need is urgent elsewhere.

SIGNIFICANT CHANGES, PROBLEMS, AND PROGRESS OF 1960-61

Interdepartmental Work Load

Total work load for all City agencies, which in 1959-60 increased by 16.5% over the previous period, this year showed a decline of 1.5% over last year. This apparent decline is due in large part to the unusual expansion in work orders experienced during the completion of Candlestick Park in the 1959-60 period, and which was not a part of the normal interdepartmental work load. Routine work orders, when considered apart from the "one-time" Candlestick Park completion efforts, would show a significant increase.

As was noted in previous reports, interdepartmental services furnished to the School Department have been subject to marked variations, with some stabilization beginning to appear last year. During the period 1959-60 the total School Department work load was only 58.5% of the previous three year average. This trend has apparently been reversed during the presently reported period, and an 8.4% increase noted over the previous year. School work, which in 1958-59 constituted 80.8% of our interdepartmental work orders, in 1959-60 declined to 66.9% of the total, and this year represents 72.5%.

Miscellaneous repairs, done on a daily special requisition basis, continued to constitute the major portion of work done for the schools. During the year, 12,337 requisitions were completed, an average of 1028 per month. Average total cost per requisition was $34.72, with direct labor representing 57.9%, material 14.8%, and overhead 27.3%.

Salaries, Wages, and Overhead Costs

Continuing the trend of recent years, Bureau wages and salaries recorded yet another significant increase during 1960-61 as was common throughout the nation in the construction industry. Weighted average for all Bureau wage personnel indicated an increase of 4.82% over the preceding year, while salaried personnel increased 4.12%. Weighted average for both groups combined indicated an increase of 4.64%. Bureau trend as compared with national averages for the building trades is indicated graphically in Figure 2.

Total overhead for interdepartmental operations averaged 47.401%, which represented an increase of 2.392% over the preceding year. As noted in last year's report, this increase was anticipated, and was due to the additional costs occasioned by changes in Social Security and the Health Service System.

Janitorial Procedures

As a result of courtesies extended the Bureau by members of the Blyth-Zellerbach committee during the course of their management survey earlier in the year, it is believed that significant progress is being made in our janitorial operations. Particular appreciation is due Mr. Kenneth McClenaghan of the Standard Oil Company, who, together with his staff, devoted many evening hours to the instruction of our supervisory personnel in cleaning methods and techniques. Definite advance has been made through the use of the materials and methods recommended during these periods, and, in particular, a massive endeavor is now under way to restore the many thousands of square feet of marble floors in the City Hall to a cleaner and better maintenance level than has previously been thought possible.

Several proprietary finishes have been tried, and at the present time the three most promising are still undergoing actual field tests to select the one best suited to our purposes and needs. While the Purchasing Department has to date sanctioned the use of these various new materials on an experimental basis, it is still too soon to know if they will ultimately approve purchase of any specific recommended material on other than a comparative price basis.

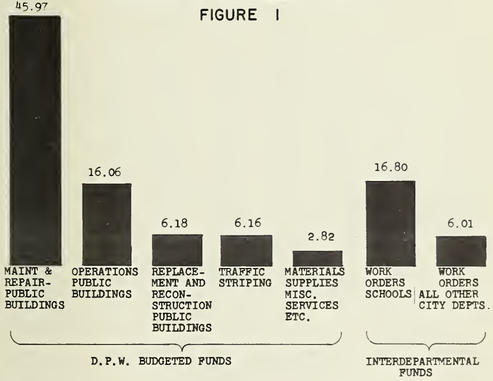
Besides the use of the various new specific materials, a change of great potential significance lies in the proposed adoption of the "group cleaning" method as opposed to the "area cleaning" or individual assignment method now used by us. Adoption of this new technique is scheduled for use in the new Hall of Justice and is to be started during the coming fiscal year. Upon completion and perfection of this method in the new premises it is anticipated that it will be extended to all other areas presently maintained by us, with a hoped for material increase in the overall level of janitorial maintenance with no corresponding increase in personnel or material costs.

Vehicle Costs

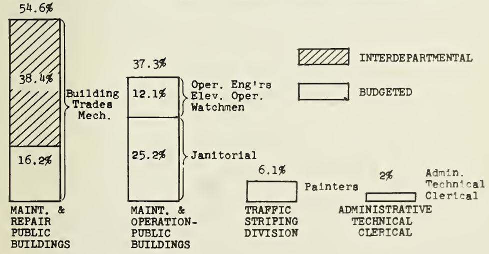
During the course of the year, passenger cars averaged 7309 miles per vehicle, at an average annual operating cost (gas-oil-miscellaneous maintenance and repair) of $147.86 each, or $.0202 per car-mile. Trucks for this period averaged 5701 miles per vehicle, with comparable annual operating costs of $202.78 each, or $.03556 per mile.

BUREAU OF BUILDING REPAIR

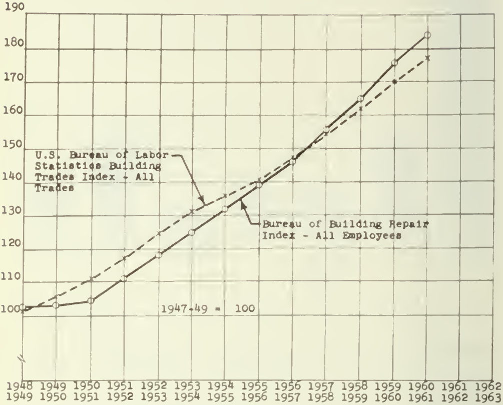
FIGURE I



PROPORTIONAL EXPENDITURES OF ALL MONEY 1960-61



PERSONNEL ASSIGNMENT

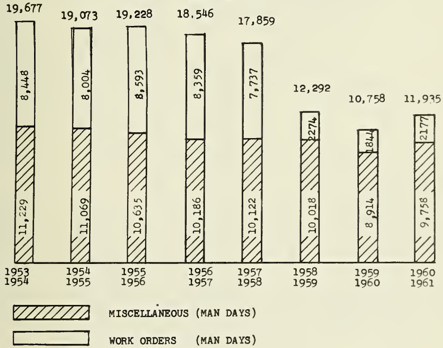


EMPLOYMENT COST INDEXES

FIGURE 2

BUREAU OF BUILDING REPAIR

FIGURE 3



SCHOOL REPAIRS

CRAFT	1953 1954	1954 1955	1955 1956	1956 1957	1957 1958	1958 1959	1959 1960	1960 1961
LOCKSMITH	6.56	5.86	6.45	5.81	5.51	4.31	4.07	4.99
PAINTER	8.90	9.30	9.28	9.30	7.67	1.73	1.42	1 26
STEAMFITTER	6.20	5.59	5.49	5.88	5.96	3.46	3.03	3.33
PLUMBER	11.10	10.23	9.61	9.45	8.42	6.63	5.78	6.45
SHEETMETAL	6.35	6.84	6.80	6.27	5.93	4.04	3.65	5.06
ELECTRICIAN	12.67	10.55	10 75	10.61	10.56	8.80	8.80	8.50
CEMENT	9.64	10.47	10.63	10.13	10.21	7.40	4.44	4.85
CARPENTER	12.82	12.51	13.80	12.58	12.36	8.51	6.92	8.16
GLAZIER	2.95	3.43	3.22	3.33	3.00	3.47	4.05	4 77
TOTAL AVERAGE EMPLOY. PER DAY	77.0	75.0	76.2	73.3	70.0	48.39	42.58	47.30

SUMMARY OF MAN DAYS EXPENDED FOR SCHOOLS

AVERAGE DAILY EMPLOYMENT OF CRAFTS

TABLE I

PUBLIC BUILDINGS UNDER THE JURISDICTION OF THE DEPARTMENT OF PUBLIC WORKS FOR MAINTENANCE AND REPAIR

	Buildings		1960-61	
Department and Activity	No.	Floor Areas Total Sq.Ft.	Total Budgeted Funds (Interdepartmental & General Repair	Unit Costs Based on Floor Areas-$/Sq. Ft.
Fire Department	56	590,000	$ 124,174	$0.210
Police Department (C)	13	118,807	30,132	0.254
Public Health				
Health Center Bldg. (C)	(4	103,370		
and Health Centers	(7 (R)	22,151	15,448	0.123
Adult Guidance Center	-	(4,500)	250	0.056
V.D. Control	1 (R)	6,200	1,123	0.181
Emergency Hospitals	6	33,352	8,153	0.244
Hassler Health Home	17	130,000	45,951	0.353
Laguna Honda Home	25	650,000	406,203*	0.625*
San Francisco Hospital	33	753,000	587,639*	0.780*
Public Library	(19	314,540	46,538	0.142
	(8 (R)	13,280		
Public Welfare				
585 Bush Street	1	43,791	2,367	0.054
150 Otis Street	-	(17,900)	--	--
S.M.R.C.-Redwood City	1	10,000	4,444	0.444
Public Works				
City Hall (C)	2	526,540	99,621	0.189
Hall of Justice (C)	2	162,523	54,319	0.334
150 Otis Street (C)	2	40,900	9,439	0.231
Maintenance Yard (C)	10	72,890	11,329	0.155
Sewage Pumping Stations	14	23,085	8,459	0.366
Sewage Treatment Plants	36	543,330	100,511	0.185
Real Estate Department				
Civic Aud.-Brooks Hall	2	434,500	16,071	0.037
Sheriff				
County Jails #2 & #4	7	138,970	21,755	0.157

Department and Activity	Buildings No.	Buildings Floor Areas Total Sq.Ft.	1960-61 Total Budgeted Funds (Interdepartmental & General Repair	Unit Costs Based on Floor Areas- $/Sq. Ft.
Juvenile Court				
Youth Guidance Center	16	200,828	28,980	0.144
Log Cabin Ranch	16	32,000	13,943	0.436
Misc. Departments	16	214,994		
and Activities	1 (R)	6,012	17,256	0.071
	-	(20,700)		
TOTALS	315	5,185,063	$1,654,105	Ave. 0.251

NOTES:

(R) Indicates building is rented. (Total of 17 rented buildings with a combined floor area of 47,643 square feet.)

(C) Indicates custodial and/or operational services also provided by Bureau of Building Repair.

(00,000) These floor areas are not added to obtain the total floor areas of all buildings as these areas are included elsewhere with other buildings.

Figures disproportionately large because of current deffered maintenance program which represents work not done in prior years.

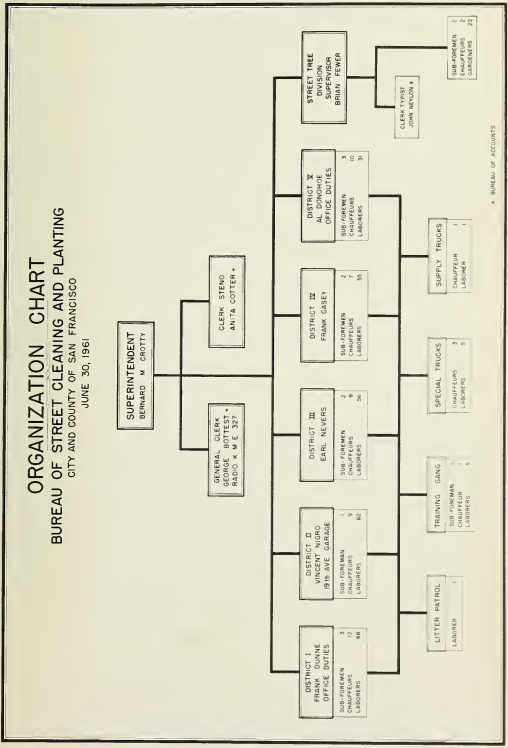
($234,950 allowed for Replacement & Reconstruction of Public Buildings are not included in any of the above sums.)

TABLE 2

STREET TRAFFIC PAINTING

Classification	Unit	Amounts	Unit Cost	Total Cost
Traffic Line Striping	Lin.Mile	675.11	$69.24	$ 46,741.65
Traffic Line Spotting	Lin.Mile	40.22	104.48	4,202.00
Intersections-General				
(a) Crosswalks (including words)	Lin.Ft.	450,651	0.1077	48,534.29
(b) Guidelines (including words)	Lin.Ft.	131,699	0.1272	16,748.32
School Crosswalks (including words)	Lin.Ft.	243,559	0.1326	32,293.89
Bus Zones (including words)	Lin.Ft.	116,998	0.0977	11,435.74
Parking Stalls				
(a) Diagonal	Number of Stalls	5,425	0.7663	4,157.15
(b) 4-foot cross	Number of Stalls	4,607	0.8294	3,820.84
Railroad Crossings	Lin.Ft.	10,133	0.0967	980.27
Curb Painting				
(a) General	Lin.Ft.	405.938	0.1143	46,398.40
(b) Taxi	Lin.Ft.	5,045	0.1390	701.45
				$216,014.00

The cost shown is the direct cost including working foreman, labor, materials, supplies and contractual service corresponding to the Bureau work program and budgeted funds.



ORGANIZATION CHART
BUREAU OF STREET CLEANING AND PLANTING
CITY AND COUNTY OF SAN FRANCISCO
JUNE 30, 1961

♦ BUREAU OF ACCOUNTS

BUREAU OF STREET CLEANING AND PLANTING

B. M. Crotty, Superintendent

The Bureau of Street Cleaning and Planting is responsible for cleaning over 1,648 curb miles of accepted streets, 104 curb miles of center islands and the maintenance of over 95 acres of landscaping and 6,500 street trees.

For these functions during 1960 - 1961 the Bureau had 360 employees and 75 units of motorized equipment. Bureau expenditures totaled $2,678,380. Street Cleaning operations required $2,478,666 and street planting operations accounted for $199,714.

In the past year this Bureau was allowed an increase of 6 employees, 2 in the Street Cleaning Division and 4 in the Street Planting Division. Even with these additional workmen we are hard pressed to keep up with the demands for cleaning services and the additional areas being landscaped each year.

The Bureau was fortunate in receiving 2 new pieces of cleaning equipment, details of which may be found in the following breakdown of operations:

Radio Station Operation

The Bureau of Street Cleaning and Planting operates the Department of Public Works radio station K.M.E. 327. Although the primary reason for this radio station is civilian defense in the case of local or national emergency, its constant use by the Department of Public Works on a workaday basis is and has been of tremendous value to all Bureaus of the Department. Realizing the value of the radio in our operations, we annually request additional mobile units in order that the public may receive faster and more efficient service. There are 30 mobile units which daily use the radio. During this year we logged a total of 13,805 calls. Of this total 9,587 were originated by this Bureau in its routine work.

Blockmen

This Bureau has 124 blockmen or handsweepers assigned to downtown and neighborhood shoping and business areas. This is a reduction of 2 from 126 during 1959-1960. In the last 3 years this Bureau has been able to reduce the number of blockmen from 134 to 124. The 10 men who have been taken from block jobs have been reassigned to gang sweeping operations and other duties where we lacked sufficient manpower. Those areas where blockmen have been eliminated are now served either by gang sweeping or mechanical sweepers.

Gang Sweeping

There are 11 sweeping gangs operating in areas where there are no blockmen working. These gangs cover their assigned routes in times varying from 5 to 16 days. Their activities include weed removal from curbs and center islands, sweeping of stairs, underpasses and city owned easements. A twelfth gang is now working full time on weed removal from city owned property including unimproved streets. We have been experimenting with several chemical weed control agents which we hope will permit us to continue our weeding activities without increasing the manpower. Table I summarizes the activities of these gangs.

Motor Sweeping

This Bureau received delivery of a new motor sweeper in 1961. This now brings our motor sweepers to 12 units. A summary of the activities may be found in Table 2.

In our last report we mentioned that the Bureau has been experimenting with new main broom material. Results, although still incomplete, are encouraging enough for us to state that we probably will be using one of the new synthetic fibers on several of our main brooms in the near future. The resultant increase in mileage and accompanying elimination of downtime will more than compensate for the added cost of the new material.

Motor Flushing

The Bureau now has 10 flushing units having received a new motor flusher early in 1961. We have been gradually replacing our old 1,500 gal. units with the larger 2,500 gal. size. A record of the flushers work for the past year may be found in Table 3.

Litter Control

The Bureau has 10 litter control trucks. These units have a crew of three, 1 chauffeur and 2 laborers. The trucks are standard 11-3/4 cubic yard street cleaning dump trucks. They are assigned to 10 districts set up for this operation. In most cases they have regular daily assignments which may consume 2 or 3 hours. The remainder of the time they patrol their assigned district looking for debris and litter, paying special attention to known paper pockets. An additional small unit operated by a laborer and radio equipped is used for emergency assignments.

Utility Trucks

Four utility trucks are used for corporation yard cleanup, including waste removal from all of the shops, purchasers shop #2 waste removal, cleanup of motor sweeper deposits, weeding activity cleanup, fill in for out of service units and any emergency assignments which may require their service. One of these four units is radio equipped which allows immediate contact with the office at any time during the day.

Litter Prevention

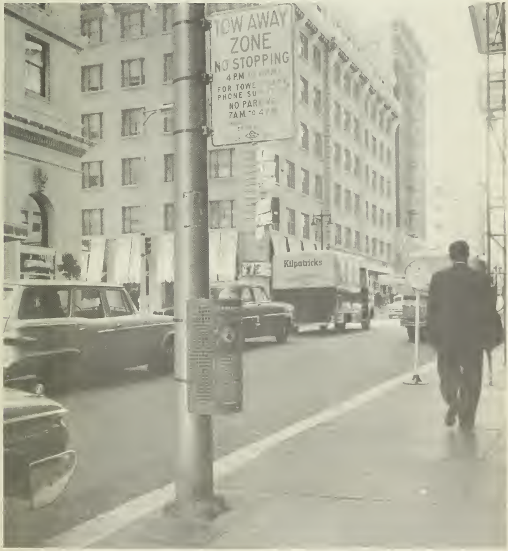
During the last two years Mayor Christopher's Committee for Litter Control has been making remarkable progress in educating the public in its duty of preventing litter and debris from reaching the street.

Before this Committee came into being the average San Franciscan had the attitude that the Bureau of Street Cleaning had plenty of help and one little piece of paper would not make much difference. This attitude is changing slowly but surely. This is due to the efforts of the Committee and the attendant publicity which they have been able to present to our citizens.

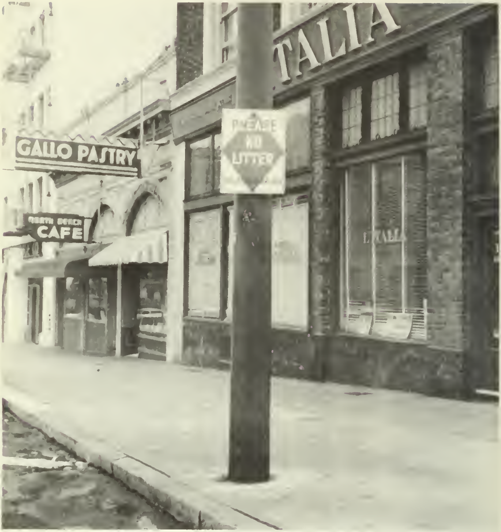
In addition to educating the public, they, being average citizens, bring to us, the professionals, ideas and suggestions which can be of help in our service to the public.

One of the principal complaints which the Committee voiced and which was echoed by the average San Franciscan was that there are just not enough waste receptacles on our streets. A survey was made by this Bureau and presented to the Committee. This survey included locations and numbers of additional waste receptacles which should be on the streets. The survey only covered the downtown and the larger outlying shopping areas. The one trouble with the whole idea was that sufficient waste receptacles would require additional men and equipment for service.

This, of course, was possible under a long range program. But the Committee felt that if the public were to respond to the publicity immediate presence of additional units was mandatory. We decided to try a brand new receptacle which had very little experience in large cities. This was a small unit which could be mounted on a pole permanently and which could be emptied by a blockman during his rounds. The advantages of the new unit are: cost $14.00 each compared to others, $19.00 up to $85.00 each; ease of servicing, emptied by blockmen; ease of removal in case of damage, spring loaded lock activated by an Allen wrench; attractive appearance which included permanent anti-litter sign with message.



NEW POLE TYPE LITTER BASKET



NEW ANTI-LITTER SIGN

We have received 250 of these units and intend to keep ordering them with available funds until all of the areas serviced by blockmen have been covered.

In addition to the need for more waste receptacles it was pointed out that some form of permanent reminder must be kept before the public. This, of course, meant anti-litter signs. We have purchased 75 such signs and now have approximately half of this number mounted in various locations throughout the city. The new litter receptacle and the new sign may be seen in accompanying photos.

Planting Division

The Planting Division is responsible for over 95 acres of landscaping and 6,500 street trees. Personnel allowed for maintenance during 1960-1961 consisted of 22 gardeners, 2 chauffeurs, 2 sub-foremen and a supervisor of the division.

During 1960-1961 the division was given 199,000 sq. ft. ($4\frac{1}{2}$ acres) of additional landscaping to maintain.

During the year 400 new trees, 425 shrubs and 2,400 ground cover plants were installed by the Division.

Eighteen thousand dollars was appropriated for additional landscaping as a result of a Departmental five year program to establish plantings in areas that now are devoid of greenery. The Division landscaped two small traffic islands on Geary Boulevard at 41st Avenue. The remainder of the appropriation is to be used for landscaping the center island on Van Ness Avenue fronting City Hall.

In cooperation with the University of California at Davis, the Planting Division conducts experimental planting to determine the most desirable types of trees for use in cities. San Francisco is only one of many California cities cooperating in this program. During 1960-1961 100 eucalypti comprising 25 species were planted in Bernal Cut. Most of these were shrub type eucalypti and small trees of the same species. Studies are made as to climate tolerance, resistance to automotive fumes and other conditions found in cities which adversely affect street trees. This brings to 60 the number of tree types in this program.

More than 400 permits for planting over 1,400 trees were issued by this Bureau during 1960-1961. Over 300 boxed trees have been installed in business sections of the city during the year. Permits for boxed trees are issued by the Central Permit Bureau. During the past three years 8,000 street trees have been planted by private citizens.

The Division ordered and received a new 1,200 gal. tank truck for irrigating young trees and for spraying insecticides and weed control agents. We also received a new 3/4 ton dump truck replacing the old truck which had more than 100,000 miles and which came to the Tree Division in 1955 from the Park.

The Street Planting Advisory Committee continued its generous work as an advisory group to the Director of Public Works for tree planting and landscaping in San Francisco. San Francisco Beautiful, an affiliate of the San Francisco Chamber of Commerce, was actively engaged in furthering the beauty of our city during 1960-1961. Through their efforts and those of the Street Tree Advisory Committee many of the city's architects and builders are including in their building plans provisions for street tree planting and landscaping of private property. Notable among these are such projects as Diamond Heights and the Western Addition Redevelopment.

NEW LANDSCAPING - PORTOLA DRIVE

TABLE I

DEPARTMENT OF PUBLIC WORKS
Bureau of Street Cleaning and Planting
CITY & COUNTY OF SAN FRANCISCO, CALIFORNIA

Annual Report - Gang Sweeping - Fiscal Year 1960-1961

(Sweeping Frequencies for Gang Route Numbered:)

Month	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12
1960												
July	1.00	3.20	2.30	3.50	1.50	2.33	2.00	1.80	2.50	2.00	3.60	*
August	1.53	4.60	4.00	3.00	1.64	2.55	2.25	2.00	1.50	1.75	3.80	
September	2.11	4.00	3.33	2.85	1.25	2.22	2.50	1.81	1.75	2.00	4.00	
October	2.00	4.20	4.20	3.00	1.16	2.33	2.62	2.00	1.75	2.20	4.20	
November	2.00	4.40	4.40	3.66	1.31	1.92	3.33	2.10	2.30	2.62	4.20	
December	1.90	4.40	5.00	4.20	1.75	2.33	3.50	2.10	2.33	3.00	4.20	
1961												
January	2.10	4.40	5.25	4.20	1.61	2.33	4.00	2.10	2.85	3.00	4.20	
February	1.46	4.00	4.50	3.80	1.35	2.11	3.00	1.90	2.25	2.71	3.80	
March	1.83	4.60	6.25	4.60	1.53	2.55	4.00	2.55	2.55	3.42	4.60	
April	1.81	4.00	5.00	4.00	1.42	2.22	3.80	2.55	2.22	2.85	3.80	
May	1.75	4.40	4.20	4.40	1.46	2.44	4.40	2.20	2.44	2.75	4.60	
June	2.00	4.40	5.00	4.00	1.29	2.44	3.66	2.20	2.44	3.00	4.75	
Total	21.49	50.60	53.43	45.21	17.27	27.77	39.06	25.31	26.88	31.30	49.75	

NOTE: Each gang is under supervision of a labor sub-foreman and is composed of 4 to 6 hand-sweepers with a truck crew of 1 chauffeur and 2 laborers. Length of each route varies from 66 to 270 curb-miles.

*Gang #12 is weeding gang.

TABLE II

DEPARTMENT OF PUBLIC WORKS
Bureau of Street Cleaning & Planting
CITY & COUNTY OF SAN FRANCISCO, CALIFORNIA

Annual Report - Motor Sweeping - Fiscal Year 1960-1961

			DISPOSITION OF 11 SWEEPERS (Hours)				
Month	Curb Miles Swept	Sweeper Loads (Number)	Sweeping	Downtime*	Total Work-Day Hours	Downtime* (Percentage)	Average Number of Sweepers In Operation
1960							
July	3,696	236	1,193	655	1,848	35.43	7.10
August	3,847	245	1,239	763	2,002	38.11	6.80
September	3,228	215	1,024	780	1,804	43.21	6.24
October	3,715	279	1,193	736	1,929	38.14	6.80
November	3,348	227	1,090	821	1,911	42.95	6.27
December	3,780	291	1,216	704	1,920	36.65	6.96
1961							
January	3,759	259	1,245	700	1,945	35.98	7.04
February	2,664	223	879	942	1,821	51.70	5.31
**March	3,896	251	1,269	1,049	2,318	45.24	6.57
April	3,862	276	1,276	795	2,071	38.37	7.39
May	4,587	277	1,492	738	2,230	33.08	8.03
June	4,263	290	1,376	846	2,222	38.06	7.43
Total	44,645	3,069	14,492	9,529	24.021	-	-

NOTE: * Downtime includes all work-day time that equipment is not engaged in actual street-sweeping; such as when undergoing repairs, held for servicing or standby.

** New sweeper added. 12 sweepers as of March 1961.

TABLE III

DEPARTMENT OF PUBLIC WORKS
Bureau of Street Cleaning & Planting
CITY & COUNTY OF SAN FRANCISCO, CALIFORNIA

Annual Report - Motor Flushing - Fiscal Year 1960-1961

Curb Month	Curb Miles Flushed	No. of Stops for Refilling Water Tanks	DISPOSITION OF 9 FLUSHERS (Hours)			Downtime* (Percentage)	Average Number of Flushers in Operation
			Flushing	Downtime*	Total Work-Day Hours		
1960							
July	5,676	2,963	1,189	98	1,287	7.61	8.31
August	6,462	3,505	1,343	253	1,596	15.82	7.57
September	5,310	2,837	1,120	270	1,390	19.40	7.25
October	6,012	3,287	1,285	270	1,555	17.34	7.43
November	5,519	2,829	1,220	297	1,517	19.56	7.23
December	5,263	2,870	1,140	393	1,533	25.60	6.69
1961							
January	5,760	2,954	1,243	293	1,536	19.06	7.28
February	5,431	2,826	1,115	221	1,336	16.50	7.51
**March	6,198	3,004	1,301	446	1,747	25.50	7.45
April	6,070	2,941	1,257	371	1,628	22.77	7.72
May	6,690	3,217	1,373	395	1,768	22.31	7.76
June	6,479	2,945	1,359	428	1,787	23.92	7.60
Total	70,870	36,178	14,945	3,735	18,680	-	-
Averages per Month	5,905	3,014	1,245	311	1,556	19.61	7.48

NOTE: Each flusher is operated with 1 chauffeur and 1 laborer for handling flushing controls.

* Downtime includes all work-day time that equipment is not engaged in street flushing; such as when undergoing repairs, held for servicing, or standby or when operating on work of different nature.

** New flusher added. 10 flushers as of March 1961.

BUREAU OF ACCOUNTS

J. J. McCloskey, Chief Clerk

The Bureau of Accounts performed its principal functions and services, consisting of the operation and control of the budgetary and financial transactions for all bureaus of the Department, at about the same level as that of the previous fiscal year. The major functions are:

(a) Preparation of the budget and supplemental appropriations;
(b) Financial statements and reports;
(c) Preparation of time rolls, maintaining personnel records, and timekeeping;
(d) Issuance of requisitions for purchase of materials and supplies;
(e) Accounting of expenditures of budgetary funds;
(f) Keeping cost records and inventories of construction, maintenance and repairs including automotive equipment, side sewer deposits and refunds, and damage to City property.
(g) Maintaining of stock records for control of material stores inventories;
(h) Issuance of checks from Department's cash revolving fund for payment of small bills;
(i) Keeping of accounts and records for State of California gas tax subventions and for various bond funds;
(j) Operation of the radio control station and supplying of clerical help for the four maintenance and operating bureaus of the Department;
(k) Preparation and processing of all documents dealing with appropriations, allocations and disbursement of funds.

The personnel of the Bureau as of June 30, 1961 consisted of:

1 - Chief Clerk
5 - Accounts I
2 - Accounts II
1 - Accountant III
9 - General Clerks
1 - Senior Clerk
2 - Head Clerks
2 - Key Punch Operators
2 - Tabulating Machine Operators
1 - Supervisor, Tabulating Division
4 - General Clerk-Stenographers
6 - General Clerk-Typists
36 - Total

No additional employees were added to the Bureau during the year.

Budget expenditures for operation of the Bureau of Accounts for the fiscal year 1960-61 were as follows:

Permanent Salaries	$167,091
Overtime Allowance	857
Holiday Pay	968
Contractual Services	20,914
Materials and Supplies	3,505
Equipment	974
Services of Other Departments	4,834
	$199,143

BUDGET

The Department's 1960-61 budget and supplemental appropriations as finally approved by the Board of Supervisors amounted to:

GENERAL FUND		
Operations and Maintenance	$10,133,052	
Replacements and Reconstruction	228,214	
Improvements	682,724	$11,043,990
SPECIAL ROAD IMPROVEMENT FUND		
Operations and Maintenance	3,500,648	
Reconstruction	231,000	
Improvements	656,000	4,387,648
SPECIAL GAS TAX STREET IMPROVEMENT FUND		
Improvements		2,408,500
TOTAL BUDGET		$17,840,138

Financial statements are prepared monthly for each bureau in the Department showing the allowances, encumbrances, expenditures and unencumbered balances for each item in their respective budgets. Statements are also prepared monthly for all bond funds showing the status of each fund. Reports in detail are prepared frequently during the year for various current projects. Final reports for projects completed from the Special Gas Tax Fund are prepared and forwarded to the State of California, Division of Highways, in accordance with the Streets and Highways Code.

PAYROLL DIVISION

For the fiscal year 1960-61, the Payroll and Personnel Division of the Bureau of Accounts prepared and processed a total of 1,426 timerolls involving an expenditure of $11,090,964.11. There was a total of 1,579 permanent employees. Included in this payroll expenditure is a substantial amount for temporary employments, there being 338 requisitions for temporary employees. There was a total of 178 requisitions for permanent civil service employees to replace vacancies due to deaths, resignations, transfers, retirements. etc. However, because of difficulty in recruiting civil service employments, it was necessary to employ 559 non-civil service employees for these authorized positions. The inter-relationship of personnel records to the preparation of these payrolls necessitated 2,388 reports to the Department physician of new cases of illness to verify legitimacy of sick pay as required by Ordinance. There were also 224 accident reports filed with the necessary follow-up procedures required which are not included in the reports to the Department physician.

PURCHASING DIVISION

During the fiscal year 1960-61, the Purchasing Section of the Bureau of Accounts processed 6,233 requisitions for purchase orders and/or revolving fund orders, in the total amount of approximately $2,438,348.44, involving 27,600 items. Outside purchases from vendors also brought about the issuance of 6,239 delivery orders involving 24,956 items, and 13,612 storeroom tags involving the delivery of 40,836 items, and 118 requisitions on the storekeeper involving 1,770 items.

For the supplying of materials for the varied activities of the Department, a sub-storeroom and a material yard are conducted, through which 25,251 transactions were handled, involving the delivery of 93,972 items to jobs. Stores inventory on hand as of June 30, 1961 amounted to $80,962.92.

ACCOUNTING DIVISION

The Accounting Section of the Bureau handled the fiscal processing of 188 formal contracts during the year, covering street improvements, sewers, and sewage treatment plants, schools, hospitals, firehouses, and various projects for other City departments under programs which are expected to continue into subsequent years, as follows:

	Number of Contracts	Amount
Special Gas Tax Street Improvement Fund	5	$ 738,959.73
Special Road Improvement Fund	32	1,408,109.05
Candlestick Park Stadium	2	42,899.00
General Fund - Public Buildings	26	868,086.18
Recreation - Park Department	15	119,630.00
San Francisco Unified School District	47	1,228,135.26
1933 Sewer Bond Fund	1	5,584.26
1944 Sewer Bond Fund	4	235,234.91
1947 Street Improvement Bond Fund	2	86,888.40
1954 Sewer Bond Fund	12	731,327.71
1954 Exhibit Hall Bond Fund	1	229,907.00
1954 S.F. General Hospital Bond Fund	3	322,230.32
1956 School Bond Fund	25	7,528,461.00
1956 Hall of Justice Bond Fund	2	246,609.00
1958 Recreation and Park Bond Fund (Steinhart Aquarium)	2	1,386,515.00
1960 Sewer Bond Fund	1	161,860.00
M.H. de Young Memorial Museum	3	25,266.00
Fire Department	1	58,808.00
Legion of Honor	1	24,880.00
Department of Electricity	1	7,962.00
Public Utilities	2	22,927.50
TOTAL	188	$15,480,280.32

In addition to the above, 84 informal bids were processed, as follows:

Public Buildings	$31,928.64
Schools	14,289.64
Special Road Improvement Fund	3,993.00
Candlestick Park Stadium	1,316.00
Miscellaneous	2,773.00
	$54,300.28

Job costs pertaining to damages to City property under the jurisdiction of the Department are compiled and forwarded to responsible parties for collection. These costs amounted to $14,639.07 for the fiscal year and embraced 349 cases.

BUREAU OF ACCOUNTS
1960 - 1961

Interdepartmental Service Under Work Order Procedure For:

Schools	$2,033,653.75
Recreation-Park	281,333.04
Maintenance and Repair - Public Buildings	1,228,860.39
Replacement and Reconstruction - Public Buildings	146,000.47
Fire Department	65,638.00
Capital Improvements	379,898.53
Special Gas Tax	1,056,410.62
Special Inspection	9,984.77
State Highways	9,541.45
Miscellaneous	22,375.34
Real Property - General City	9,058.19
1947 Street Improvement Bonds	122,449.19
1933 Sewer Bonds	7,333.82
1944 Sewer Bonds	271,757.51
1954 Sewer Bonds	510,106.61
1948 Sewage Treatment Bonds	10,420.75
1948 School Bonds	3,894.93
1948 Juvenile Court Bonds	32,066.88
1956 School Bonds	230,367.80
1954 San Francisco Hospital Bonds	388.579.58
1952 Firehouse Bonds	4,451.40
1954 Exhibit Hall Bonds	16,934.54
1955 Playground and Recreation Center Bonds	3,224.30
1956 Hall of Justice Bonds	88,966.86
1958 Park-Recreation Bonds	16,841.24
1959 Civic Auditorium Bonds	17,772.98
1959 Palace of Fine Arts Bonds	11,364.23
Redevelopment Agency	42,714.45
War Memorial	25,756.83
Art Museum	3,738.70
DeYoung Museum	41,106.63
Legion of Honor	27,091.12
Engineering	6,052.37
Public Utilities	42,499.62
Publicity and Advertising	3,573.93
Special Road Improvement	944,861.33
Department of Electricity	9,280.00
TOTAL INTERDEPARTMENTAL SERVICE	$8,125,962.15

SUMMARY OF TRANSACTIONS

Budgeted Funds, Subject to Control and Appropriated to:

BUREAU	BUDGET		EXPENDITURES	
	1959-60	1960-61	1959-60	1960-61
GENERAL FUND				
General Office	$ 176,019	$ 189,782	$ 172,734	$ 188,408
General Office - Improvements	532,872	682,724	702,350	327,293
Architecture	619,407	591,979	536,217	576,565
Building Inspection	686,534	781,092	652,232	764,293
Engineering	552,579	561,816	536,576	540,177
Central Permit	54,300	57,421	53,188	56,647
Accounts	193,059	205,338	190,144	199,143
Building Repair	3,258,001	3,102,455	3,153,890	2,083,330
Traffic Striping	202,842	217,860	199,138	216,014
Street Cleaning	2,350,923	2,496,237	2,327,433	2,478,666
Sewer Repair	1,013,621	1,154,802	1,055,383	1,142,994
Sewage Treatment Plants	1,073,099	1,153,834	1,037,607	1,099,961
Sewage Pumping Stations	120,233	128,595	116,000	124,858
SPECIAL ROAD IMPROVEMENT FUND				
Street Repair	1,673,987	1,775,362	1,608,797	1,733,466
Bridges and Tunnels	174,555	180,813	167,809	172,405
Street Tree Planting	155,215	202,432	150,138	199,217
Street Tree Planting - Improvements	-	23,000	-	497
Traffic Engineering	602,096	548,880	576,633	512,506
Traffic Signal Maintenance	232,404	335,092	207,781	320,425
Engineering Administrative	72,929	110,069	67,271	105,110
Maintenance and Reconstruction	291,271	579,000	163,888	519,988(a)
Construction	2,243,285	633,000	1,343,560	1,636,279(b)
SPECIAL GAS TAX STREET IMPROVEMENT				
Maintenance	371,000	-	350,898	2,527(c)
Construction	3,012,000	2,408,500	2,801,522	2,250,953(c)
Subtotals	$19,662,231	$18,120,083	$18,171,189	$17,251,722
Less:				
Budget transfers between bureaus	-	279,945	-	277,076
TOTALS	$19,662,231	$17,840,138	$18,171,189	$16,974,646

(a) Expenditures of $170,226 from funds budgeted in prior years.

(b) Expenditures of $1,421,786 from funds budgeted in prior years.

(c) Expenditures of $1,827,310 from funds budgeted in prior years.

CENTRAL PERMIT BUREAU

Sidney Franklin, Supervisor

FUNCTIONS

The principal function of the Central Permit Bureau is the issuance of all permits under the jurisdiction of the Department of Public Works, and the collection of the fees required therefor. This includes permits for the erection, alteration, demolition and moving of buildings (as well as the subsidiary permits in connection therewith), permits for all types of billboards and signs, and permits involving the use or excavation of streets and sidewalks. All plumbing, gas appliance and electrical permits are now also issued in this bureau.

It is the duty of the staff of the Central Permit Bureau to receive applications for these various types of permits, route them for processing, issue the permits when the applications are properly approved, and collect the necessary fees.

The Central Permit Bureau is the custodian of all public records relevant to permits issued by the Department of Public Works, and of all plans and specifications in conjunction with these permits. These records date back to the 1906 Earthquake and are assuming more importance each year in determining the status of buildings affected by our slum clearance program.

Another service performed in this bureau is the assignment of street addresses to all new buildings and the elimination of possible confusion resulting from improper existing numbers. Our official house number records are constantly referred to by realtors, title insurance companies, etc., when the correct street numbers for buildings must be obtained.

It is also the duty of the Central Permit Bureau to render bills for all claims for damages to property under the jurisdiction of the Department of Public Works, and for costs in excess of deposits in the installation of side sewers. The moneys collected from these bills, as well as all other receipts of the department are cleared through this bureau for deposit in the proper funds in the City Treasury.

PERSONNEL

The personnel of the Central Permit Bureau, as of June 30th, 1961, was as follows:

1 Supervisor
1 Cashier
2 Senior Clerks
1 General Clerk-Stenographer
5 General Clerk-Typists

THE FOLLOWING TABLES ILLUSTRATE THE SCOPE OF THE ACTIVITIES OF THE

CENTRAL PERMIT BUREAU

TABLE I

PERMITS ISSUED AND FEES RECEIVED

	1960-1961		1959-1960	
	Permits	Fees	Permits	Fees
Buildings	12,865	$ 285,785	11,145	$ 288,719
Billboards	143	535	149	523
Demolitions	432	3,630	337	3,500
Boiler Installations	229	1,132	144	1,120
Boiler Inspections	773	5,868	882	5,645
Street Space*	923	65,955	876	59,638
House Numbers	742	2,796	855	3,498
House Moving	60	1,120	77	1,540
Excavations (Public Utilities, etc.)	24,231	48,462	9,818	26,008
Excavations (Exclu. of Utilities)	649	3,344	750	3,804
Flue Registrations	85	1,700	65	1,300
Flues - New Buildings	49	146	37	93
Flues - Old Buildings	156	590	82	280
Flues - New Buildings, Coupons	2,825	1,412	3,450	1,725
Flues - Old Buildings, Coupons	300	600	250	500
Posting Notices	693	1,888	793	2,080
Flower Markets	42	1,416	39	1,284
Advertising	15	2,553	14	1,937
Surveys	42	15,460	40	24,190
Engineering Inspections	51	16,145	62	29,445
Electrical Inspections	14,926	156,845	17,070	120,534
Sign Inspections	Included in Elec. Insp.	4,696	Included in Elec. Insp.	5,977
Electrical Sales	2,162	22,837	2,246	22,655
Plan Checking	6,064	63,603	5,503	65,937
Architect's Investigation	65	975	67	1,005
Garage Door Coupons ·	1,050	3,150	550	1,650
Hearings for Substitute Materials	19	1,590	9	1,210
Plumbing Inspections	16,641	110,808	16,972	59,874
Gas Appliance Inspections)	Included in Plbg. Insp.	7,005	Included in Plbg. Insp.	14,329
Journeyman Plumber's License)		1,378		1,710
Gas Appliance Dealers)		640		670
Residential Inspection Reports	23	1,425	Not in existence.	-
Residential Record Reports	2,958	14,290		-
Dump Permits	7	700	"	-
TOTAL - TABLE I	89,220	850,479	72,282	752,380
TOTAL - TABLES II & III	2,348	5,786,995	2,503	5,666,516
GRAND TOTAL PERMITS AND REVENUE	91,568	$6,637,474	74,785	$6,418,896

* Permits and Fees only
See Table II for Refundable Deposits.

TABLE II

MISCELLANEOUS DEPOSITS

	1960-61		1959-60	
REFUNDABLE DEPOSITS	Permits	Deposits	Permits	Deposits
Street Space	*	$ 17,730	*	$ 21,911
Sub-Sidewalks	2	740	-	-
Deposit on Plans	1,561	91,910	1,629	83,080
Excavations	*	1,096	*	914
TOTAL	1,563	111,476	1,629	105,905
PARTIALLY REFUNDABLE DEPOSITS				
Side Sewers	591	285,825	696	306,419
Excess Costs - Side Sewers	64	4,243	43	4,405
TOTAL RECEIVED	655	290,068	739	310,824
AMOUNT REFUNDED		125,128		133,751
Net Revenue applied or to be applied to Installation Costs		164,940		177,073
AGENCY DEPOSITS				
Street Improvement Bonds	130	19,358	135	16,802
TOTAL	2,348	$420,902	2,503	$433,531

* Street Space and Excavations require both a Fee and a Deposit. Amounts shown are Deposits only.

TABLE III

MISCELLANEOUS REVENUE

	1960-1961 REVENUE	1959-1960 REVENUE
General Fund	$ 170,672	$ 80,862
Special Road Improvement Fund	2,931,445	2,895,266
Highway Trust Fund	20,501	20,578
Special Gas Tax - Street Improvement Fund	2,240,562	2,230,387
San Francisco Unified School District Fund	-	2,165
1954 Laguna Honda Home Bond Fund	-	447
1954 Sewer Bond Fund	508	3,280
1952 Fire House Bond Fund	1,588	-
Refundable Deposit - 912.3 Fund	817	-
TOTAL	$5,366,093	$5,232,985

TABLE IV

STATEMENT OF CONDITION SPECIAL FUNDS AS OF JUNE 30, 1961

	Balance June 30, 1960	Deposits 1960-1961	Refunds 1960-1961	Balance June 30, 1961
Special Permit Fund (Street Space and Sub-Sidewalk Deposits)	$31,361.00	$18,470.00	$18,120.00	$31,711.00
Street Improvement Fund (Payments of Street Improvement Bonds)	465.27	-	-	465.27
Excavation Fund	2,169.20	1,096.00	1,253.20	2,012.00
Deposits on Plans	20,813.00	91,910.00	97,490.00	15,233.00

APPENDIX I

BUREAU OF ENGINEERING CURRENT CONTRACT DATA SUMMARY

Showing All Contract Work Awarded or Underway

July 1, 1960 - June 30, 1961

Table	Type of Construction	No.	Contracts Awarded Aggregate Value	Amount Expended Fiscal Year 1960 - 1961
A	Major Thoroughfares	1	$ 882,433.50	$ 878,670.00
B-1	Streets - Private Contracts	40	407,362.00	1,579,053.00
B-2	Streets - Assessment Proceedings	17	220,777.26	377,151.02
B-3	Streets - Public Contract City Pay	14	450,611.80	425,203.27
B-4	Streets - Car Track Removal	1	305,492.92	305,492.92
C	Traffic Signals & Channelization	3	61,956.83	68,806.21
D-1	Sewers Pipe - Vitrified Clay & Concrete	9	465,367.54	729,625.37
D-2	Sewers - Concrete Monolithic	2	357,784.00	837,858.02
E	Miscellaneous	33	875,235.55	562,535.33
	TOTALS	120	$4,027,021.40	$5,764,395.14

TABLES

On the following pages appear separate tables of Current Contracts for each of the types of construction listed above. The source of the funds used to finance each project is indicated in the Tables according to the following:

Abbreviation Legend

Designation	Description of Fund
General	General Fund City and County
Spec. Rd.	Special Road Improvement Fund
Major Sts.	Special Gas Tax Improvement Fund
Assmt. Proceedings	Assessed to Property Benefiting Under the Street Improvement Ordinance of 1934
Pd. Prop. Owners	Cost Borne by Property Owners under Private Contract
1944 Sewer Bd.	Bond Issue Voted by Citizens on Nov. 7, 1944 - $12,000,000
1947 St. Imp. Bd.	Bond Issue Voted by Citizens on Nov. 4, 1947 - $22,850,000
1948 Sewage Tr. Bd.	Bond Issue Voted by Citizens on June 1, 1948 - $15,000,000
1954 Sewer Bd.	Bond Issue Voted by Citizens on June 8, 1954 - $12,645,000
1947 Off St. Park Bd.	Bond Issue Voted by Citizens on Nov. 4, 1947 - $ 5,000,000
1954 Lag. Honda Bd.	Bond Issue Voted by Citizens on Nov. 2, 1954 - $ 5,475,000
D. of E.	Department of Electricity Funds
Muni Rwy	Municipal Railway Funds
Park Rec.	Park-Recreation Dept. Funds
Hall of Justice	Bond Issue Voted by Citizens on June 5, 1956 - $19,475,000

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
A - MAJOR THOROUGHFARES					
Geary Expressway Underpass at Fillmore St. (Constr.) Chas. L. Harney, Inc.	12-2-59	84%	$ 981,889.00	$ 559,440.00	Maj. Sts. Spec. Rd. 1947 St.Impr.Bd. 1944 Sewer Bd. General Muni Rwy
Brotherhood Way (Junipero Serra - Lake Merced) (Re-align,Overpass) Chas. L. Harney, Inc.	6-24-60	78%	167,307.50	129,510.00	1954 Sewer Bd. Maj. St. D. of E.
Geary Expressway (Contr. 3) (Masonic - Franklin) (Constr.) Chas. L. Harney, Inc.	3-17-61	23%	882,433.50	189,720.00	Maj. Sts. Spec. Rd. 1944 Sewer Bd. 1947 St.Impr.Bd. Water Dept.
Total Awarded & Expended During Fiscal Year			$ 882,433.50	$ 878,670.00	

CURRENT CONTRACT DATA 1960-1961

Street or Subdivision	Impvts	Contractor	Awarded	Completed	Contract Amount
B-1 STREETS - PRIVATE CONTRACTS PD. PROP. OWNERS					
Alder St. - Ankeny 225' N. Harkness	Gr	The Fay Impr.Co.	12-19-58	10%	$ 2,000.00
14th Ave. - 100' - 400' N. Rivera	Gr	A. Malerbi Sand	8-14-59	0%	5,000.00
Armstrong Ave. - Jennings St. - Ingalls St.	Gr,S,C, P	The Fay Impr.Co.	1-22-60	7-8-60	27,250.00
*Cresta Vista - Lulu Alley - Globe Alley	Gr,S,C, P,Ltg	Gellert Bros.	2-24-60	7-11-60	37,800.00
Diamond Hts. Redev. Area B-1	Gr,S,C, P,Ltg, St.,Wall, Land.	Guy F. Atkinson	3-1-60	70%	2,417,297.10
Ulloa St. - 137' W. W/L Waithman 72' E.	S	Lowrie Paving Co.	3-4-60	9-8-60	1,650.00
Foerster St. Easement N. of Melrose	S	Gellert Bros.	3-25-60	10-15-60	5,500.00
Rolph St. - Crocker -Amazon #3	Gr,S,C, P,Splwy	Gellert Bros.	3-30-60	90%	9,750.00
Rose Mary Court - E. 25th Ave. S. Vicente St.	Gr,S,C, P,Wall	T.E. McCormick	4-13-60	90%	6,000.00
Kearny St. - S/L - 130' S. Francisco St.	S	Lowrie Paving Co.	5-6-60	11-15-60	3,865.00

Southern Hills Subdiv. No.1	S	Gellert Bros.	5-20-60	7-26-60	48,000.00
Balboa St. - Crossing of La Playa	S	The Fay Impr.Co.	6-8-60	6-30-60	1,000.00
Wayland St. - Cambridge - Yale	Gr,S,C, P	The Fay Impr.Co.	6-10-60	6-16-61	6,500.00
Guttenberg St. - Hanover - Bellevue	S	The Fay Impr.Co.	6-15-60	7-25-60	1,820.00
Larkin St. - W.Curb - M.H. in C/L N. of Grove	Sewer Wing	Lowrie Paving Co.	7-1-60	7-19-60	1,000.00
Southern Hills Subdiv. No.1	C, P	Gellert Bros.	7-8-60	8-2-60	35,000.00
Geneva Ave. - Restani Ped. Way 200' E.	S	John F.Coughlan	7-27-60	8-11-60	3,000.00
Quincy St. - Pine St. S. End	Gr,C,P	Cahill Bros.	7-29-60	8-1-60	1,100.00
4th St. (E.S.) Berry St. 80' S.	C,Sw	Phillips & Van Orden	8-3-60	11-16-60	300.00
*Cambridge St. (E/2) Wayland St. 300' S.	Gr,S,C, P	The Fay Impr.Co.	8-3-60	5-26-61	7,000.00
33rd Ave. (E.Sw) - Noriega St. 93' S.	Parking Bay	Herbst Nor.Prop.	8-17-60	90%	1,000.00
Fredela Lane - Clairview Ct. Marview Way	Stairs Walk	Gellert Bros.	8-31-60	10-25-60	2,000.00
Sutter, Stockton, Bush Sts.	C, Sw	W. J. Moran	9-7-60	11-25-60	3,500.00
Burnett Ave. - Dawnview N. & Easement E.	S	Gellert Bros.	9-21-60	10-5-60	8,000.00
Russia Ave. (S/2) Dublin St. 100' E.	Gr,C,P	B. Fontana & Sons	9-21-60	9-30-60	1,209.00

CURRENT CONTRACT DATA 1960-1961

Street or Subdivision	Impvts	Contractor	Awarded	Completed	Contract Amount
Sutter-Stockton Gar. - Sutter,Stockton, Bush Sts.	S,C,P, Rel.Hyd.	Wm. J. Moran	10-14-60	2-28-61	15,000.00
Gillette Ave. - 210' N. Blanken Ave. (Easement)	S	John F.Coughlan	10-21-60	12-16-60	2,200.00
Stanford Hts. Ave. -Los Palmos Dr. N.E. End	S,C,P, Splwy	Gellert Bros.	10-28-60	90%	13,000.00
*Burnside Ave. - 30' to 305' N. of Mangels	Gr,S,P, Gd. Rail	Gellert Bros.	11-2-60	3-23-61	8,200.00
Casitas Ave. - Ludlow Alley E. End	Gr,S,C, P,Ltg	Gellert Bros.	11-2-60	0	50,000.00
Dorman Ave. - Opposite No.75	C, P	Nat.Industries	11-4-60	12-5-60	500.00
Alice Griffith Garden Homes Project	Gr,S,C, P	S.F. Housing Authority	11-16-60	50%	140,000.00
*Yale St. - Wayland St.300'S.	Gr	The Fay Impr.Co.	11-18-60	6-20-61	6,100.00
Locksley Ave. & Lawton St.	S	Chas.L.Harney,Inc.	12-7-60	2-15-61	5,000.00
Brenham Pl. - N. of Clay St.	S	Haas & Haynie	12-21-60 1-4-61	1-26-61	3,000.00
*Locksley Ave. - 6th Ave. - Lawton St.	C, P	Chas.L.Harney,Inc.	12-21-60	0	10,000.00
South Hill Blvd. - Canyon Dr. - County Line	S,C,P	Gellert Bros.	12-23-60	3-27-61	12,000.00
*Yale St. - Wayland St. - 300' S.	S,C,P.	The Fay Impr.Co.	12-23-60	6-20-61	6,100.00

Cambridge St. - Bacon St. - Wayland St.	G,S,C, P	The Fay Impr.Co.	1-6-61	5-25-61	$	11,500.00
Harrison St. - X-ing Hawthorne St.	Tr. Rem.	Lowrie Paving Co.	2-8-61	5-23-61		1,625.00
Castenada Ave. - N. Magellan Ave.	S	Kenneth Evers	2-10-61	5-23-61		1,500.00
*Tompkins Ave. (N½) - Bronte St. - Bradford St.	C,S,P	The Fay Impr.Co.	2-15-61	0		2,600.00
Berry St. (N½) - Westerly From 3rd St.	Cul,P	Southern Pacific	3-8-61	5-5-61		400.00
South Hill Blvd. - S. Canyon Dr.	Wall	Gellert Bros.	4-5-61	90%		3,000.00
Bradford St. - Tompkins Ave. and 125' N.	C,S,P	The Fay Impr.Co.	4-19-61	90%		6,100.00
Shafter Ave. - E. & W. of Griffith	Track	Pacific Pave.Co.	4-26-61	6-16-61		1,820.00
22nd Ave. W/S - South of Taraval St.	C, P	Patrick Rocks	4-26-61	6-1-61		1,000.00
15th Ave. - Sheldon Terrace Easement	S	The Fay Impr.Co.	5-10-61	6-10-61		4,800.00
*Allison St. & Watt Ave. - Hanover St. to S'ly Term.	C,S,P	Gellert Bros.	5-12-60	10		8,000.00
Great Highway - At S.Line Lincoln Way	C, P	Balliet Constr. Corp.	5-24-61	6-15-61		500.00
*Ankeny St. - (Portions) Holyoke St. - Ordway St.	C,S,P	The Fay Impr.Co.	6-7-61	0		11,000.00
Beale St. - 160' S.E. Howard St.	Tr.	Pacific Pave.Co.	6-16-61	6-21-61		1,308.00

CURRENT CONTRACT DATA 1960-1961

Street or Subdivision	Impvts	Contractor	Awarded	Completed	Contract Amount
Locksley Ave. - Lawton St. to S'ly Term.	Lights	R.F. Galli	6-23-61	0	3,000.00
*Oxford St. - Bacon St. - Wayland St. Wayland St. - Oxford St. - Cambridge St.	C,S,P	The Fay Impr.Co.	6-23-61	0	15,000.00
Total Awarded During Fiscal Year					$ 407,362.00
Total Value of Work Done During Fiscal Year					$1,579,053.00

S = Sewers; C = Curbs; P = Paving; Gr = Grading; Sw = Sidewalk;
Spwly = Spillway; Ltg = Lighting; Stwy = Stairway

* Remaining Portions Improved Under Public Contract

CURRENT CONTRACT DATA 1960-1961

Street or Subdivision	Impvts	Contractor	Awarded	Completed	Contract Amount
B-2 STREET ASSESSMENT PROCEEDINGS					
Clarendon Ave. - Stanyan - Laguna Honda	S,C,P, Ltg	Chas.L.Harney,Inc.	10-3-58	9-1-59	$ 231,323.62 (187,680.28)
Mangels Ave. - Detroit 125' W. Edna	S,C,P	Chas.L.Harney,Inc.	6-24-59	5-9-60	32,257.82 (5,544.70)
Christopher Dr. - Clarendon Crestmont - 775' W.	S,C,P, Ltg	Chas.L.Harney,Inc.	6-24-59	2-25-60	61,996.55 (28,650.31)
Melrose Ave. - Gennessee - Foerster	S,C,P	Chas.L.Harney,Inc.	8-7-59	5-9-60	19,781.30 (7,100.69)
Mansell St. - San Bruno - University	Wid,S,C, P,Ltg	The Fay Impr.Co.	10-9-59	8-25-60	319,560.10 (294,141.40)
Raymond Ave. - Sawyer - W. End	S,C,P	The Fay Impr.Co.	12-9-59	7-19-60	21,951.65 (4,417.36)
Los Palmos Dr. - Foerster - Stanford Hts.	C, P	The Fay Impr.Co.	12-23-59	7-29-60	16,205.29 (7,829.67)
*Cresta Vista Dr. - Lulu Alley - Globe Alley	C, P	Gellert Bros.	2-24-60	7-11-60	18,785.45 (10,735.45)
Campbell Ave. - Somerset - Alpha	S,C,P	J.F.Coughlan	2-24-60	12-7-60	15,761.95 (8,683.08)
Powhattan Ave. - Peralta - Franconia	Gr,C,P	E.J.Treacy	3-16-60	12-21-60	4,767.18 (2,199.08)
Innes Ave. - Phelps - 3rd	Gr,S,C, P	Pacific Pave.Co.	3-25-60	11-28-60	15,268.71 (5,000.00)
Orizaba Ave. - Garfield - Lakeview	S,C,P	Chas.L.Harney,Inc.	3-30-60	6-19-61	29,511.30 (19,500.00)

CURRENT CONTRACT DATA 1960-1961

Street or Subdivision	Impvts	Contractor	Awarded	Completed	Contract Amount
Ordway St. - Girard - Brussels	Gr,S,C, P	The Fay Impr.Co.	4-20-60	11-18-60	$ 11,757.03 (6,641.76)
Dalewood Way - in Sherwood Forest	Gr,S,C, P	Gellert Bros.	6-15-60		35,716.54 (1,255.16)
Mayflower St. - Crossing of Peralta Ave.	Gr,C,P	Pacific Pave. Co.	6-15-60	10-24-60	2,325.36 (632.18)
Army St. - E. of Castro St.	Gr,S,C, P	The Fay Impr.Co.	6-15-60	1-6-61	10,371.17 (3,333.67)
Olmstead St. - Goettingen St. - 120' W.	Gr,S,C, P	Chas.L.Harney,Inc.	7-13-60	99%	6,500.00 (4,700.00)
Golden Gate Heights - Contract No. 6	S,C,P	Chas.L.Harney,Inc.	9-21-60	99%	68,780.00 (31,000.00)
Mojave St. - Bronte - Bradford	Gr,S,C,, P	E.J. Treacy	9-30-60	1-24-61	4,208.94 (1,997.41)
Casitas Ave. - Landsdale - Ludlow	Gr,C,P	The Fay Impr.Co.	10-5-60	0	4,355.00 (2,000.00)
*Burnside Ave. (Portions) Mangels - Bosworth	Gr,S,C, P	Gellert Bros.	11-2-60	99%	2,597.15 (1,600.00)
*Locksley Ave. (Portions) - 6th Ave. - Lawton St.	Gr,C,P	Chas.L.Harney,Inc.	12-21-60	10%	5,220.00 (200.00)
Powhattan Ave. - Wool - Moultrie	Gr,S,C, P	Chas.L.Harney,Inc.	12-21-60	0	11,398.80 (6,700.00)

Wayland St. Crossings at Cambridge and Yale	Gr,S,C,P	The Fay Impr.Co.	12-21-60	8-22-60	8,570.40 (3,000.00)
Innes Ave. (W½) - Griffith St. - Hawes St.	Sw	F.Ferrando Co.	3-22-61	4-21-61	1,089.00 (0)
Delta St. - Hamilton St. - Ankeny St. Hamilton St. - Delta St. - Mansell St. Ankeny St. - Delta St. -120'E.	G,C,S,P	The Fay Impr.Co.	5-10-61	10%	17,444.27 (5,000.00)
Ankeny St. - Intersection Holyoke Mill Adler	Gr,S,C,P	The Fay Impr.Co.	5-10-61	10%	6,410.00 (1,500.00)
Armstrong Ave. - Crossing Ingalls	Gr,S,C,P	The Fay Impr.Co.	5-10-61	0	5,480.00 (0)
Harold Ave. - Grafton Ave. and 200' S'ly	Gr,C,P	F.D.Sperry Co.	5-10-61	10%	3,870.00 (1,400.00)
Allison St. and Watt Ave. - Hanover St. S'ly	Gr,S,C,P	Gellert Bros.	5-10-61	20%	5,861.70 (800.00)
Bemis St. - Roanoke St. - Mateo St.	Gr,S,C,P	Lowrie Paving Co.	5-19-61	0	57,017.00 (1,700.00)
Ankeny St. - Holyoke St. - Ordway St.	Gr,S,C,P	The Fay Impr.Co.	6-9-61	10%	5,006.00 (3,400.00)
12th Ave. - Rockridge Dr. - N'ly to Exist.Pave.	Gr,C,P	Chas.L.Harney,Inc.	6-30-61	0	6,969.00 (1,000.00)
Total Awarded During Fiscal Year					$220,777.26
Total Value of Work Done During Fiscal Year					$377,151.02

( ) = Estimated or final amount of City Obligation. Balance through Assessment of Property Benefited. City Funds from Special Road Improvement.Fund.

* Remaining Portions improved under Private Contract.

S = Sewers; C = Curbs; P = Paving; Gr = Grading; Sw = Sidewalk

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
B-3 STREETS - PUBLIC CONTRACT CITY PAY					
Pavement Reconstr. on Various Streets (Curb,Pvg,Sewer) Chas.L.Harney,Inc.	3-9-60	7-22-60	$ 49,290.94	$ 3,190.94	Spec.Rd. 1944 Sewer Bd.
Sacramento St.Pavement Reconstr.(Curb,Pvg) The Lowrie Paving Co.	6-22-60	8-19-60	30,187.05	30,187.05	1947 St.Impr.Bd. Spec.Rd.
Lincoln Park Rd. Pavement Reconstr.(Pvg) Chas.L.Harney,Inc.	7-22-60	11-21-60	33,557.22	33,557.22	Spec.Rd.
Cambridge St. (W½) Wayland St. to 300' S. (Curb-Pvg) The Fay Impr. Co.	8-3-60	5-26-61	5,759.25	5,759.25	Spec.Rd.
O'Shaughnessy Blvd. & Other Streets (Resurfacing) Chas.L.Harney,Inc.	9-30-60	2-28-61	149,585.38	149,585.38	Spec.Rd.
Mansell St. (S.Side) San Bruno to University (Sidewalks) Bur. of Bldg.Repair	11-25-60	4-15-61	2,658.00	2,658.00	Spec.Rd.
Harriet St. & Other St. Adj. to New Hall of Justice(Widen-St.Lts) Pac.Pavements Co.,Ltd.	11-25-60	7-7-61	17,191.00	17,191.00	Spec.Rd.

Yale St. (E½) -Wayland St. to 300' S. (Curb-Pvg) The Fay Impr. Co.	12-28-60	99%	4,997.00	0	Spec.Rd.
Pavement Reconstruction Chestnut St. Between Laguna & Buchanan Sts. Lowrie Paving Co.	1-18-61	3-31-61	11,481.00	11,481.00	Spec.Rd.
Geneva Ave. and Others (Resurfacing) Bragato Paving Co.	2-15-61	6-8-61	85,322.48	85,322.48	Spec.Rd.
Tompkins Ave. (S½) Bronte to Bradford (Construction) The Fay Impr. Co.	2-15-61	10%	2,496.60	0	Spec.Rd.
Divisadero St.-Lombard St. to Marina Blvd. (Recon.Resurf.Light.) The Fay Impr. Co.	3-15-61	98%	77,959.92	69,120.00	Spec.Rd.
Candlestick Park Stadium Access Roads (Const. of Pavement) Lowrie Paving Co.	2-27-61	3-28-61	17,150.95	17,150.95	Spec.Rd.
Oxford St.(W½) Bacon St. to Wayland St. Wayland St.(S½) Oxford St. to Cambridge St. (Construction)	6-23-61	0	13,323.00	0	Spec.Rd.
Minna St. - Between 4th St. & 5th St. (Reconstruction) Pac.Pavements Co,Ltd.	4-26-61	0	20,890.00	0	Spec.Rd.

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
Gold St. - Between Sansome St. and Montgomery St. (Pavement Reconstr.) Pac.Pavements Co.Ltd.	5-24-61	25%	8,240.00	0	Spec.Rd.
Total Awarded and Expended During Fiscal Year			$450,611.80	$425,203.27	

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
B-4 STREETS - CAR TRACK REMOVAL					
Jackson St. - Hyde St. to Steiner St. (Tr.Rem.; Pvt.Rec.) The Fay Impr. Co.	7-13-60	4-26-61	$305,492.92	$305,492.92	1947 St.Imp.Bd. 1954 Sewer Bd. Spec.Rd.
Total Awarded and Expended During Fiscal Year			$305,492.92	$305,492.92	

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
C TRAFFIC SIGNALS & CHANNELIZATION					
Lombard St. and Richardson Ave. (Cont.& Wiring) R. Flatland	5-4-60	11-30-60	$ 42,256.21	$ 42,256.21	Spec.Rd. Maj.Sts. State Hwy.
13th St. (Mission St. -S. Van Ness) (Channel) Abbett Electric Corp.	6-29-60	12-6-60	28,942.00	23,040.00	Spec.Rd.
Portola Drive - Teresita to Evelyn Way (Signals & Channelization) Abbett Electric Corp.	2-15-61	95%	17,380.50	0	Spec.Rd.
Traffic Signals at Isolated Crossings (Contract No. 18 - Installation) Emsco Elect. Corp.	3-15-61	5%	42,077.33	3,510.00	Spec.Rd. Major Sts.
Monterey Blvd. Near Northgate Drive (Flashing Traffic Beacon) Abbett Electric Corp.	6-26-61	0	2,499.00	0	Spec.Rd.
Total Awarded and Expended During Fiscal Year			$ 61,956.83	$ 68,806.21	

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
D-1 SEWERS - PIPE, VITRIFIED CLAY & CONCRETE					
Lincoln Way Sec. "C" (20th Ave. - 29th Ave.) (Construction) M & K Corporation	4-8-60	12-6-60	$325,313.91	$317,123.91	1954 Sewer Bd.
N.P.C.S. Sec. D-2 (Channel - Howard) (Force Main) M & K Corporation	5-11-60	1-19-61	255,588.97	255,588.97	1948 Sewer Bd. 1954 Sewer Bd. Southern Pac.
Vicente St. 32nd Ave. to 33rd Ave. (Construction) M. J. Lynch	9-7-60	11-16-60	19,748.00	19,748.00	1954 Sewer Bd.
Foerster St. Teresita Blvd.to Melrose (Replace) M & K Corporation	10-28-60	1-10-61	12,406.00	12,406.00	1954 Sewer Bd.
30th Ave. Clement to California (Replace) McGuire & Hester	11-16-60	1-11-61	9,155.55	9,155.55	1954 Sewer Bd.
O'Farrell St. - Scott St. to Pierce St. (Replacement Sewer) Lowrie Paving Co.,Inc.	3-1-61	4-14-61	18,222.94	18,222.94	1944 Sewer Bd.

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
North Point St. - Broderick to Divisadero St. (Replacement of Sewer) Lowrie Paving Co.,Inc.	3-10-61	5-18-61	$ 8,250.10	$ 0	1954 Sewer Bd.
Franklin St. - Bay St. Sewer System Sec. A (Construction) The Fay Impr. Co.	3-29-61	26%	295,566.00	67,680.00	1954 Sewer Bd.
Golden Gate Park -Academy of Sciences to 10th Ave. (Constr. of Sewer) McGuire & Hester	4-19-61	82%	39,950.50	29,700.00	1954 Sewer Bd.
Bush St. Sewer - Baker St. to Broderick St. (Replacement Sewer) McGuire & Hester	5-5-61	0	15,115.00	0	1954 Sewer Bd.
Eddy St. Sewer,Octavia St. to Van Ness Ave. (Replacement Sewer) The Fay Impr. Co.	5-26-61	0	46,953.45	0	1944 Sewer Bd. 1954 Sewer Bd.
Total Awarded and Expended During Fiscal Year			$465,367.54	$729,625.37	

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
D-2 SEWERS - CONCRETE MONOLITHIC					
N.P.C.S. Sec. B-2 (Construction) Chas.L.Harney,Inc.	1-4-57	1-26-60	$520,811.86	$100,826.86	1954 Sewer Bd.
N.P.C.S. Sec. D-1 (Pump Sta. & Rel.Fac.) M & K Corporation	2-18-59	9-22-60	445,106.26	407,846.26	1954 Sewer Bd.
N.P.C.S. Sec. D-4 (Construction) Walter Lenkeit	6-3-60	65%	309,129.00	179,280.00	1948 Sewer Bd. 1954 Sewer Bd.
29th St. - Sanchez - San Jose Ave. (Gunite Lining) Emsco of S.F.	6-29-60	8-23-60	20,304.90	20,304.90	General
			- - - - - -		
N.P.C.S. Sec. D-8 (Construction) M. J. Lynch	10-5-60	64%	149,897.00	84,780.00	1954 Sewer Bd.
N.P.C.S. Secs. D-6 & D-7 (Construction) Walter Lenkeit	12-21-60	25%	207,887.00	44,820.00	1954 Sewer Bd.
Total Awarded and Expended During Fiscal Year			$357,784.00	$837,858.02	

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
E MISCELLANEOUS					
City Hall - Assessor's Office (Inst.Fluor.Lts.) Bur. of Bldg. Repair	1-6-60	1-16-61	$ 12,454.36	$ 12,454.36	General
Presidio Branch Library (Replace Boiler) Cornely Co.	2-5-60	7-5-60	3,918.00	678.00	General
Fitzgerald Pump Sta. (Repl. Pump Fac.) Bur. of Bldg.Repair	2-10-60	5-18-61	5,161.07	5,161.07	1954 Sewer Bd.
Market St. near Corbett Ave. (Landscape) E.L. Dunn & Son	2-10-60	8-19-60	13,161.70	2,761.70	Spec.Rd.
R.S.S.T.P. - Sludge Control House (Repl.Exh.Vent) Apex Sheet Metal Wks	3-9-60	8-12-60	4,993.00	493.00	General
Candlestick Park Fire Prot. System (Constr.) Allan Autom.Sprinkler	3-16-60	11-18-60	74,873.44	20,073.44	General
Candlestick Park - Traffic Control Tower (Constr.) James H.McFarland	4-27-60	11-22-60	23,200.70	15,000.70	1947 St.Impr.Bd.

Sunset Branch Library (Repl. Ltg. Fixt.) Coopman Electric Co.	5-6-60	10-10-60	6,574.00	6,574.00	General
Richmond & Presidio Branch Libraries (Repl. Lts.) Bur. of Bldg.Repair	5-27-60	5-9-61	13,065.70	13,065.70	General
Candlestick Park - Bus Loading Area (Lights) Electr.Maint.& Serv.Co.	6-1-60	7-20-60	6,665.00	6,665.00	Spec.Rd.
Upper Market St. & Portola Dr. (Landscaping) Bernard Gayman	6-10-60	3-31-61	36,161.70	36,161.70	Spec.Rd.
Grove St. (Larkin - Van Ness Ave.) (A.W.S.S. Ext.) M. J. Lynch	6-29-60	9-13-60	19,079.56	19,079.56	General
Stockton St. Tunnel at Bush St. (Modify E.Stwy) Thos.E. McCormick	7-8-60	12-23-60	14,290.00	14,290.00	Spec.Rd.
Park Merced, Fulton, Seacliff No. 2 Pump Stas.(Elim.Cross-conn.) Jesse M. Lumsden	7-22-60	12-13-60	13,986.00	13,986.00	1954 Sewer Bd.
Jefferson St. - Leavenworth to Powell (Street Lights) Abbett Electric Corp.	7-29-60	3-22-61	19,013.81	19,013.81	Dept.Elect. Spec.Rd.

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
El Camino del Mar Slide Area (Test Borings) J. N. Pitcher Co.	7-29-60	9-16-60	$ 3,657.40	$ 3,657.40	Major Sts.
Veteran's Bld. & Opera House Basements (Elim. Seepage) Mapco Waterproof.Co.	8-5-60	10-1-60	4,036.00	4,036.00	General
Municipal Asphalt Plant Storage Facilities (Constr.) H. E. Rahlmann Co.	8-31-60	1-4-61	7,132.00	7,132.00	Spec.Rd.
Mission St. - Otis, McCoppin, 12th, etc. (Street Lights) Abbett Electric Corp.	9-21-60	90%	28,942.00	23,040.00	Spec.Rd.
Islais Creek Bridge - Lift Mach. (Reconstr.) Eichleay Corp.	9-21-60	3-21-61	109,620.00	109,620.00	Maj.Sts.
S.F.F.D. Pump Stas. Nos. 1 & 2 (Pilot Fl.Fail.) Cornely Co.	10-5-60	2-3-61	5,974.50	5,974.50	General
San Bruno Ave. & Rickard St. (Street Lights) Electr.Maint,&Serv.Co.	9-30-60	3-1-61	6,829.57	6,829.57	Spec.Rd.
Market, California & Drumm Sts. (Landsc. & Rec.Island) Chas. L. Harney, Inc.	10-26-60	6-8-61	20,910.00	20,910.00	Maj.Sts. Spec.Rd.

Candlestick Park Parking Area (Slurry Seal) Chas. L. Harney,Inc.	11-25-60	2-24-61	2,614.80	2,614.80	General
Lakeshore,Marina,Hyde, Commercial Pump Sta. (Elim.Cross-Conn.) Bur. of Bldg. Repair	11-30-60	0	16,892.54	0	1954 Sewer Bd.
N.P.S.T.P. Effluent Lines Piers 33 & 35 (Repair) Mapco Waterproofing Co.	12-9-60	5-12-61	3,993.00	3,993.00	General
Upper Market St. & Portola Dr. Contract 2 (Landscaping) Bernard Gayman	12-7-60	5-10-61	6,765.95	6,765.95	Spec.Rd.
City Hall - S.E.Quadrant (Plumbing) Jesse M. Lumsden	12-21-60	90%	19,666.00	17,550.00	General
City Hall - County Clerk's Office (Lights) Decker Electr.Constr.Co.	12-21-60	3-27-61	7,766.00	7,766.00	General
S. F.County Jail No. 2 (Heating System) Robt. M.Johnson & Sons	12-28-60	95%	6,974.00	5,940.00	General
Glendale St. at Corbett Ave.(Stairs,Walls,Lts) C. J. Collins Co.	12-30-60	3-29-61	6,899.00	6,899.00	Spec.Rd.
Hall of Justice General Parking Lot (constr.) Chas.L. Harney, Inc.	1-13-61	95%	82,490.00	66,870.00	Hall Justice
Golden Gate Valley Branch Library (Repl.Light.Fix) Bur. Bldg. Repair	3-29-61	0	5,185.41	0	General

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
Candlestick Park Visual Background Fence (Construction) Hart & Hynding	3-3-61	5-25-61	$ 36,755.07	$ 36,755.07	Park-Rec.
Mansell St. - San Bruno to University Ave. (Landscaping) Watkins & Sibbald	4-7-61	7%	35,766.50	1,170.00	Spec.Rd.
Digester Group No. 1 - S.E.Sewage Tr.Plant (Revising Piping) C.Norman Petersen,Inc.	5-26-61	0	161,860.00	0	1960 Sewer Bd.
S.E. Sewage Treat. Plant (Sludge Steel Storage Hopper) Brady Constructors	5-26-61	0	45,570.00	0	1954 Sewer Bd.
Salt Water Intake Line at Fleishhacker Pool (Repairs) Healy Tibbitts Constr.	5-3-61	7-7-61	39,554.00	39,554.00	Park-Rec.
Kearny St. Near Chestnut Retaining Wall (Construction) Ben Bearse Co.	6-2-61	0	1,874.00	0	Spec.Rd.
Steinhart Aquarium Salt Water Collector (Construction) Renney Method Western	6-14-61	0	79,250.00	0	Park-Rec.

Voting Machine Warehouse - Lighting System (Installation) Coopman Electric Co.	6-14-61	0	4,875.00	0	General
Laguna Honda Home - Replace Piping (Alter Refrig.System) Western Plumbing Co.	6-23-61	0	65,974.00	0	General
Youth Guidance Center Boys' Clinic (Install Ventilation Facilities Alladin Heating & Ventilating Corp.	6-23-61	0	1,387.00	0	General
Candlestick Park - Construction of Addtl Gates (Construction) Cyclone Fence U.S.Steel	6-16-61	90%	906.00	0	Park-Rec.
City Hall Assessor's Office Installation Ventilating System Colan Heating & Vent.Co.	6-23-61	0	7,826.00	0	General
Total Awarded and Expended During Fiscal Year			$875,235.55	$562,535.33	

APPENDIX II

BUREAU OF ARCHITECTURE
CURRENT CONTRACT DATA SUMMARY
Showing All Contract Work Awarded or Under Construction
July 1, 1960 - June 30, 1961

Table	Type of Construction	Contracts No.	Awarded Aggregate Value	Amount Expended Fiscal Year 1960-1961
A-1	New School Construction	6	$ 7,519,472.00	$ 4,409,582.00
A-2	Misc. Alterations-Schools	49	972,120.00	846,871.00
A-3	Acoustical Jobs - "	2	10,905.00	21,287.00
A-4	Roofing Jobs - "	11	84,266.00	69,661.00
A-5	Resilient Flooring "	0	0	0
A-6	Int. & Ext. Painting "	16	147,066.00	199,567.00
A-7	Yard Paving "	2	86,867.00	150,982.00
B-1	Fire Dept. New Construction	1	58,808.00	214,873.00
B-2	" " Reconstruction	1	2,575.00	2,575.00
C-1	S.F. General Hospital	6	736,534.00	1,606,709.00
C-2	Laguna Honda Home	1	229,907.00	378,208.00
D	M.H. De Young Memorial Museum	1	1,765.00	8,381.00
E	Youth Guidance Center	1	3,053.00	87,600.00
F	Civic Center	5	11,927.00	561,437.00
G	Hall of Justice	1	164,119.00	13,341,783.00
H	Miscellaneous	9	1,503,275.00	809,982.00
	TOTALS	112	$11,532,659.00	$22,709,498.00

On the following pages appear separate tables of current contracts for each of the types of construction listed above. The source of the funds used to finance each project is indicated in the tables according to the following:

Abbreviation Legend

Designation	Description of Fund
General	General Fund City and County
1948 School	Unified School District, Bond Issue voted by citizens on November 2, 1948, $48,890,000.00

1956 School	Unified School District Bond issue voted by citizens on November 6, 1956, $27,000,000.00
District	Funds of S.F.U.S.D.
Real Property Fund	Real property fund of the S.F. Fire Department
1952 Fire	Fire Department, Bond Issue voted by citizens on November 4, 1952, $4,750,000.00
1954 Hospital	Hospital Bond Issue voted by citizens on November 2, 1954 $5,830,000.00
Def. Maintenance	Deferred Maintenance funds, Laguna Honda Home annual budget
1954 Ex. Hall	Civic Center Exhibit Hall bond issue voted by citizens on November 2, 1954 $3,275,000.00
1958 Rec. Park	Recreation and Park Bond issue voted by citizens on June 3, 1958
Special Road Impr.	Annual Budget item

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
A-1 NEW SCHOOL CONSTRUCTION					
Longfellow Elem. School (1646) Louis C. Dunn, Inc.	11-21-58	9-16-60	$ 844,000.00	$ 28,596.00	1956 School
Francisco JHS Addition (1687) Peter Sartorio	1-23-59	8-25-60	578,000.00	69,360.00	1956 School
City College- Arts & Classrooms Bldg. Athletic Field-Addns to Cafeteria-Gyms (1697) Louis C. Dunn, Inc.	4-10-59	3-1-61	2,245,600.00	814,940.00	1956 School
Portola JHS Addition (1717) General construction Pacific Coast Builders	5-29-59	9-2-60	463,500.00	9,270.00	1956 School
Pacific Heights School (1839) New fence & retaining wall Morlind Const. Co.	2-5-60	10-13-60	1.829.00	1,573.00	District
Southwest Sr. HS (1849) General Construction Pacific Coast Builders	6-24-60 - - - -	45%	4,081,150.00 - - - - - - -	1,836,518.00	1956 School
Clarendon School (1895) General Construction Cahill Const. Co.	8-26-60	60%	848,849.00	509,309.00	1956 School

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
A-1 NEW SCHOOL CONSTRUCTION (continued)					
J. Denman HS Auditorium (1747R) General Construction Hart & Hynding, Inc.	8-5-60	52%	$ 455,183.00	$ 236,695.00	1956 School
J. Ortega Elem. School (1908) General construction S. J. Amoroso Const. Co.	11-4-60	35%	608,690.00	213,041.00	1956 School
Southeast High School General Construction (1916) M & K Corporation	12-2-60	21%	4,324,000.00	508,040.00	1956 School
Jefferson Elem. School General construction (1924) Jos. Bettancourt	12-16-60	16%	707,750.00	113,240.00	1956 School
Golden Gate Elem. School General Construction (1950) Jos. Bettancourt	2-15-61	12%	575,000.00	69,000.00	1956 School
Total Awarded and Expended During Fiscal Year			$7,519,472.00	$4,409,582.00	

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
A-2 MISCELLANEOUS ALTERATIONS					
Various Schools (1797) Storeroom alterations Stenmark Const. Co.	1-15-60	9-6-60	$ 14,577.00	$ 1,458.00	District
McKinley School (1819) Relocation of Portable Classrooms C. J. Collins Co.	1-15-60	8-4-60	10,354.00	1,035.00	District
Sir F. Drake School (1822) Relocation of Port. Classrooms H. E. Rahlmann Co.	1-15-60	8-10-60	13.230.00	2,646.00	District
City College (1827) Relocation of Port.Classrooms Stenmark Const. Co.	2-5-60	9-6-60	9,087.00	273.00	District
Board of Education (1843) Admin. Offices - Int. alterations to IBM Room Stenmark Const. Co.	2-10-60	9-8-60	22,288.00	7,801.00	District
Various Schools (1834) Storeroom and various alt. Stenmark Const. Co.	2-26-60	12-16-60	7,680.00	384.00	District
Bayview Elem. School (1806) Ext. alterations and window installation Stenmark Const. Co.	2-26-60	100%	44,676.00	44,676.00	District

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
A-2 MISCELLANEOUS ALTERATIONS (continued)					
A. Lincoln High School (1703R) Improvements to Athletic Field Engstrum & Nourse	3-9-60	3-1-61	$ 285,400.00	$ 188,364.00	1956 School
Portola Jr. High School Int. Alterations to rooms 240 & 241 (1832) Bureau of Bldg. Repair	3-11-60	9-26-60	6,532.00	327.00	District
Various Schools (1848) Installation of Sprinkler System A & B Engineering, Inc.	3-25-60	8-7-60	16 475.00	5,766.00	District
Portola Jr. High School (1854) Elec. service & feeder alterations Abbett Electric Corp.	3-25-60	9-6-60	17,687.00	7,075.00	District
Emerson School (1855) Window replacement Wm. McIntosh & Son	4-8-60	8-29-60	23,389.00	16,372.00	District
Various Schools (1861) Instal. of Sprinkler Sys. A & B Engineering, Inc.	4-8-60	9-8-60	9,370.00	2,283.00	District
Madison School (1858) Floor reconstruction Bureau of Bldg. Repair	4-13-60	9-1-60	2,067.00	2,067.00	District

Mission High School (1867) Elec. service & main switchboard Bureau of Bldg. Repair	4-29-60	11-17-60	5,285.00	528.00	1956 School
Galileo High School Alt. to Sciencr room (1824) H. E. Rahlmann Co.	5-6-60	2-14-61	77,977.00	63,941.00	1956 School
Mission High School Alt. to sewing rooms & foods laboratory (1814) C. J. Collins Co.	5-20-60	10-14-60	47,787.00	43,008.00	1956 School
Cabrillo School (1876) Int. alterations Bureau of Bldg. Repair	5-27-60	1-21-61	3,948.00	395.00	1956 School
Galileo High School Elec. service & switchboard alterations (1888) Brayer Elec. Co.	6-3-60	11-4-60	7,946.00	7,787.00	District
D. Webster School Fire Escape repairs (1883) Fair Mfg. Co.	6-3-60	10-7-60	5,740.00	5,166.00	District
Frederic Burk School Relocation of Port. classrooms (1874) Stenmark Const. Co.	6-3-60	2-17-61	11,796.00	11,796.00	District
Various Schools (1873R) Window replacement Stenmark Const. Co.	6-3-60	10-13-60	23,219.00	23,219.00	District

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
A-2 MISCELLANEOUS ALTERATIONS (continued)					
Portola Jr. High Alt. to shops (1831) C. J. Collins Co.	6-3-60	3-1-61	$ 128,278.00	$ 121,864.00	1956 School
Balboa High School Alt. to third floor (1836) Arthur Baum	6-10-60	11-1-60	45,158.00	45,158.00	1956 School
Parkside School Elec. service & switchboard (1879) Bureau of Bldg. Repair	6-10-60	9-26-60	5,566.00	1,948.00	1956 School
Cabrillo School Sprinkler System (1890) Allan Auto. Sprinkler Corp.	6-24-60	2-17-61	29,987.00	29,987.00	1956 School
Everett & Denman Schools Equipment Installation (1892) Wm. McIntosh & Son	6-24-60 ------	9-16-60	7,472.00 ------	7,472.00	District
H. Mann JHS Science Room modernization (1884) Erbentraut & Sommers	7-8-60	12-16-60	30,635.00	30,635.00	1956 School
Aptos JHS (1902R) Int. Communication System A. B. Loudermilk Co.	8-5-60	6-16-61	21,485.00	21,485.00	1956 School

Various Schools (1909) Wire mesh enclosures Cyclone Fence Co.	8-5-60	3-16-61	3,405.00	3,405.00	District
Douglas School (1910) Misc. alterations Arthur W. Baum	8-10-60	10-11-60	3,489.00	3,489.00	District
Portable Classrooms (1903) F. Burk to B. Carmichael School Merz Bros.	8-26-60	12-2-60	17,732.00	17,732.00	District
Garfield School & 5 others Partial fire sprinkler system (1925) A & B LaDew Engineering, Inc.	9-7-60	1-10-61	19,400.00	19,400.00	District
Portola JHS (1856) Alt. to classrooms Phase I H.E. Rahlmann Co.	9-7-60	1-13-61	9,545.00	9,545.00	1956 School
Pacific Heights School (1930) New deck & wall coatings Harold A. Price & Co.	10-14-60	12-27-60	3,478.00	3,478.00	District
Mission High School (1936) Window replacement Myron A. Johnson	11-18-60	1-5-61	859.00	859.00	District
Various Schools (1931) New yard benches & repairs C. J. Collins Co.	11-18-60	3-17-61	14,918.00	14,918.00	District
Madison School (1938) Chimney repairs L.J. McDermott & Sons	11-18-60	2-14-61	991.00	991.00	District

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
A-2 MISCELLANEOUS ALTERATIONS (continued)					
Junipero Serra School New classroom shelves (1942) Bureau of Bldg. Repair	11-23-60	2-2-61	$ 2,173.00	$ 2,173.00	District
Lafayette School (1948) Replacement of elec. pole riser service Crown Elec. Maint. Co.	12-2-60	2-20-61	943.00	943.00	District
Galileo High School Elevator repairs (1954) Westinghouse Elec. Corp.	12-16-60	5-10-61	1,345.00	1,345.00	District
Polytechnic High School Stair repairs (1951) Brookman Co., Inc.	12-16-60	4-7-61	925.00	925.00	District
Frank McCoppin School Fence repairs (1949) Bureau of Bldg. Repair	12-16-60	4-15-61	2,583.00	2,583.00	District
Portola JHS (1921) Alt. to classrooms-Phase II Antone Petersen & Sons	12-30-60	5-5-61	10,847.00	10,847.00	1956 School
Hawthorne School (1956) New water service Bureau of Bldg. Repair	1-27-61	6-26-61	1,401.00	1,401.00	District
Presidio JHS (1957) Storage facilities for Cafeteria Refuse Merz Bros.	1-27-61	5-29-61	890.00	890.00	District

City College (1947) Elec. laboratory & Offices H. E. Rahlmann Co.	2-10-61	39%	35,343.00	13,784.00	District
Francis Scott Key Annex Int. alterations (1964) H. E. Rahlmann Co.	3-1-61	5-25-61	2,092.00	2,092.00	District
George Washington High School Instal. of new bleachers (1941R) C. J. Collins Co.	3-1-61	5-26-61	6,863.00	6,863.00	District
Madison School (1967) Rebuilding of existing brick chimney Dee Engineering Co.	3-1-61	4-25-61	1,391.00	1,391.00	District
A. P. Giannini JHS (1959) Alt. to Science rooms Stenmark Const. Co.	4-7-61	0	4,693.00	0	District
Board of Education (1970) Replacement of doors, Nourse Auditorium Bureau of Bldg. Repair	4-7-61	25%	901.00	225.00	District
Various Nursery Schools (1966) Fence & Paving work O. C. Jones & Sons	4-7-61	0	3,643.00	0	District
Portola JHS (1926) Alt. to classrooms H. E. Rahlmann Co.	4-7-61	6-30-61	3,674.00	3,674.00	District
City College (1976) Maint. & repairs-gyms John A. Nelson, Inc.	4-21-61	7%	43,133.00	3,019.00	District

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
A-2 MISCELLANEOUS ALTERATIONS (continued)					
Mission High School (1982) Wood wainscot in boys Gym C. J. Collins Co.	4-21-61	6-5-61	$ 1,147.00	$ 1,147.00	District
B. Franklin Adult School Instal. of new floor covering (1980) Malott & Peterson-Grundy	4-21-61	30%	8,487.00	2,547.00	District
Polytechnic High School Installation of dry standpipe (1983) Bureau of Bldg. Repair	5-3-61	40%	2,415.00	966.00	1956 School
Various Schools (1985) Installation of wire glass and lam. panels Arthur W. Baum	5-3-61	0	11,407.00	0	1956 School
A. Lincoln High School & Everett JHS (1974) Garbage can washers Robert L. Sage	5-12-61	0	2,121.00	0	District
Yerba Buena School (1969) Window replacement Arthur W. Baum	5-12-61	0	17,268.00	0	District
McKinley School and Sheridan School (1960) Alterations to toilet areas Stenmark Const. Co.	5-19-61	0	49,377.00	0	1956 School

Jas. Lick Jr. High (1939) Alt. to 2nd floor for new homemaking rooms De Narde Const. Co.	5-19-61	20%	$ 66,855.00	$ 13,371.00	1956 School
Polytechnic High School Academic Building (1972) reconstruction of metal stairs Wm. McIntosh & Son	5-19-61	2%	19,799.00	396.00	1956 School
Various Schools (1987) Series #1-Installation of new doors & Lam. panels Stenmark Const. Co.	5-19-61	0	33,245.00	0	1956 School
Argonne & Marshall Schools Installation of Automatic fire sprinklers (1988) Security Fire Protec.Co.	5-19-61	0	27,802.00	0	1956 School
Polytechnic High School (1971) Int. alterations of Academic Building Wm. McIntosh & Son	5-24-61	4%	188,888.00	7,556.00	1956 School
Fairmont School Conversion of woodshop to classrooms (1963) Noel A. O'Reilly	5-25-61	0	15,935.00	0	1956 School
Various Schools (1992) Instal. of doors & panels John A. Nelson, Inc.	6-9-61	0	35,600.00	0	1956 School
Guadalupe School (1994) Window replacement and painting Wilco Const. Co.	6-9-61	0	50,600.00	0	District

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
A-2 MISCELLANEOUS ALTERATIONS (continued)					
Various Schools (2002) Installation of doors and panels Wm. McIntosh & Son	6-23-61	0	$ 101,587.00	0	1956 School
Emerson School (1984) Additional play yard Pacific Pavements Co.Ltd.	6-23-61	0	20,900.00	0	1956 School
Various Schools (2004) Repair and paint metal stairs De Narde Const. Co.	6-26-61	0	15,510.00	0	District
Presidio JHS (2005) Alt. to dishwashing area H. E. Rahlmann Co.	6-26-61	0	4,868.00	0	District
Various Schools (2009) Instal. of fire sprinklers Allan Auto.Sprinkler Corp	6-28-61	0	43,875.00	0	1956 School
Frank McCoppin School and West Portal School (2012) Floor repairs H. E. Rahlmann Co.	6-30-61	0	5,657.00	0	District
Total Awarded and Expended During Fiscal Year			$972,120.00	$846,871.00	

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
A-3 ACOUSTICAL JOBS					
Com. Stockton School (1712) Acoustical tile Western Asbestos Co.	3-20-59	8-14-59	$ 9,890.00	450.00	1948 School
Redding School (1862) Acoustical tile Western Asbestos Co.	4-22-60	8-29-60	9,550.00	6,685.00	1956 School
H. Hoover JHS & John O'Connell Voc.HS (1893) Acoustical tile Western Asbestos Co.	6-10-60 - - - -	8-17-60	3,838.00 - - - -	3,838.00	1956 School
Various Schools (1943) Repairs to acoustical tile ceilings Western Asbestos Co.	11-18-60	3-17-61	4,990.00	4,990.00	District
Jas. Lick JHS (1986) Acoustical tile Fiberglass Engineering & Supply Corp.	5-12-61	90%	5,915.00	5,324.00	District
Total Awarded and Expended during Fiscal Year			$ 10,905.00	$ 21,287.00	

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
A-4 ROOFING JOBS					
H. MAnn JHS (1863) Reroofing & misc. work Regal Roofing Co.	4-22-60	7-18-60	$15,911.00	$ 3,182.00	District
Candlestick Cove School and Others (1880) Re-roofing Alta Roofing Co.	7-8-60	12-14-60	9,263.00	9,263.00	District
City College (1894) Re-roofing of the men's and women's gyms Regal Roofing Co.	7-8-60	10-28-60	6,172.00	6,172.00	District
Cabrillo School (1881) Re-roofing Western Roofing Service	7-22-60	10-21-60	6,239.00	6,239.00	District
Various Schools (1906) Re-roofing & misc. work Regal Roofing Co., Inc.	8-10-60	12-29-60	8,211.00	8,211.00	District
Lafayette School (1917) Re-roofing & misc. work Bender Roofing, Inc.	8-12-60	11-1-60	3,094.00	3,094.00	District
Hancock School (1913) Re-roofing & misc. work Star Roofing Co.	8-12-60	11-2-60	5,634.00	5,634.00	District

Everett Jr. High (1919) Re-roofing & misc. work Star Roofing Co.	8-26-60	1-6-61	16,800.00	16,800.00	District
Various Schools (1920) Roof tile repairs Alta Roofing Co.	8-26-60	12-14-60	2,414.00	2,414.00	District
Ulloa School (1922) Re-roofing & misc. work Wm. J. Anderson	8-26-60	11-2-60	263.00	263.00	District
Portola JHS (1918) Re-roofing & misc. work Western Roofing Service	8-26-60	1-8-61	8,389.00	8,389.00	District
Various Schools (2003) Resurfacing roof decks Malott & Peterson-Grundy	6-26-61	0	17,787.00	0	District
Total Awarded and Expended During Fiscal Year			$84,266.00	$69,661.00	

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
A-6 INTERIOR AND/OR EXTERIOR PAINTING					
Ulloa School (1853) Ext. painting Phoenix Painting Co.	3-11-60	8-22-60	$ 5,499.00	$ 3,574.00	District
Phoebe A. Hearst School Ext. painting (1852) Kurt R. Stearn	3-11-60	8-26-60	1,690.00	337.00	District
Cleveland School Ext. painting (1850) Phoenix Painting Co.	3-11-60	8-22-60	7,655.00	6,507.00	District
Mission High School (1847) Ext. painting & rprs. Arntz Const. Co.	3-11-60	8-22-60	79,800.00	73,416.00	District
Everett JHS (1776R) Int. painting of boys' & girls' locker area J. Wm. Sorensen	3-25-60	8-9-60	5,688.00	5,688.00	District
H. Mann JHS (1860) Ext. painting Veterans Painting Co.	4-8-60	8-10-60	17,140.00	2,742.00	District
Edison School (1857) Ext. painting Veterans Painting Co.	4-8-60	8-17-60	9,995.00	3,398.00	District

Farragut School (1829) Ext. & int. Painting R. P. Paoli & Co.	4-8-60	12-14-60	$17,019.00	$14,466.00	District
Galileo High School (1866) Int. painting of boys' gym D. E. Burgess Co.	4-22-60	8-29-60	7,945.00	7,945.00	District
D. Webster School (1875) Ext. painting Manor Painters	5-2-60	8-23-60	4,989.00	4,241.00	District
Presidio JHS (1869) Ext. painting Phoenix Painting Co.	5-6-60	8-22-60	9,224.00	8,117.00	District
R.L. Stevenson School Ext. painting (1872) A.C. Saraiva	5-6-60	8-22-60	7,824.00	5,477.00	District
Com. Stockton School (1828) Int. & ext. painting R. P. Paoli Co.	5-20-60	8-29-60	12,364.00	12,364.00	District
D. Stone School (1887) Ext. painting Veterans Painting Co.	6-3-60	8-17-60	2,300.00	1,955.00	District
Balboa High School (1889) Int. painting of Auditorium Lobby Robert Thompson	6-3-60	8-15-60	1,725.00	1,725.00	District
	- - - -		- - - -		

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
A-6 INTERIOR AND/OR EXTERIOR PAINTING	(continued)				
Various Schools (1897) Painting game lines The Empire Co.	7-8-60	10-27-60	$ 1,288.00	$ 1,288.00	District
Candlestick Cove and Edison Nursery Schools Ext. painting and misc. work (1905) Robt. Thompson	7-22-60	9-24-60	4,922.00	4,922.00	District
City College (1896) Ext. painting & glass block repair W. G. Thompson	8-10-60	3-17-61	15,885.00	15,885.00	District
Miraloma School (1912) Ext. painting multi-purpose room A. Quandt & Sons	8-26-60	12-12-60	1,940.00	1,940.00	District
Sutro School (1937R) Int. painting of 2 child care rooms New Method Paint.& Dec.Co.	11-18-60	1-5-61	693.00	693.00	District
Andrew Jackson School (1968) Painting New Method Paint.& Dec.Co.	3-10-61	45%	10,112.00	4,550.00	District
Anza Elem. School (1973) Painting J. Wm. Sorensen	4-7-61	35%	10,000.00	3,334.00	District

Various child care centers Painting (1978) Manor Painters	4-21-61	0	$ 3,428.00	0	District
Jas. Lick JHS (1975) Painting Robt. Thompson	5-12-61	25%	37,300.00	9,325.00	District
Com. Stockton School Painting (1989) Atlas Painting Co.	5-19-61	50%	5,816.00	2,908.00	District
Edward R. Taylor School Painting (1990 A. Quandt & Sons, Inc.	5-19-61	3%	10,468.00	314.00	District
Bayview School (1995) Painting W. G. Thompson	5-24-61	3%	11,870.00	356.00	District
West Portal School Painting (1996) Phoenix Painting Co.	5-24-61	0	13,290.00	0	District
Various Schools (1997) Painting Robt. Thompson	6-9-61	25%	8,400.00	2,100.00	District
Sunnyside School (1998) Painting Robert Thompson	6-9-61	0	9,344.00	0	District
Various Schools (2007) Painting game lines Riley's Striping Service	6-26-61	0	2,310.00	0	District
Total Awarded and Expended During Fiscal Year			$147,066.00	$199,567.00	

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
A-7 YARD PAVING					
Various Schools (1865) Yard paving - painting game lines Malott & Peterson-Grundy	4-22-60	1-18-61	$19,487.00	$19,487.00	District
Various Schools (1870) Yard paving - painting game lines, Series 2 Malott & Peterson-Grundy	6-3-60	1-18-61	47,777.00	45,388.00	District
Douglas School (1899) Yard paving - painting game lines Malott & Peterson-Grundy	6-24-60 - - - -	1-19-61	31,717.00 - - - -	31,717.00	District
Francisco JHS (1928) New playyard addition Wm. McIntosh & Son	10-14-60	6-16-61	54,390.00	54,390.00	1956 School
Various schools (2006) Resurfacing yard paving Malott & Peterson-Grundy	6-28-61	0	32,477.00	0	District
Total Awarded and Expended during Fiscal Year			$86,867.00	$150,982.00	

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
B-1 FIRE DEPARTMENT NEW CONSTRUCTION					
Engine #15, Proj. 107 (1722) General construction Clovis Const. Co.	4-29-59	11-11-60	$321,500.00	$ 61,085.00	1952 Fire
Fire House #14, Proj. 19 General Construction (1783) Ira H. Larsen Co.	9-18-59 - - -	4-14-61	252,111.00 - - - -	153,788.00	1952 Fire
Extension to S.F. Fire Dept. Training center (1977) Ivan E. Sorg	6-9-61	0	58,808.00	0	Real Property
Total Awarded and Expended During Fiscal Year			$58,808.00	$214,873.00	

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
B-2 FIRE DEPARTMENT-RECONSTRUCTION					
Engine House #39 (1923) Door replacement Ben Bearse	8-24-60	1-16-61	$ 2,575.00	$ 2,575.00	General
Total Awarded and Expended During Fiscal Year			$ 2,575.00	$ 2,575.00	

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
C-1 S.F. GENERAL HOSPITAL					
Consolidation of Laboratories Bldgs. 100, 200, 300 & 4 Proj. #4 (1696) Arntz Const. Co.	3-25-59	11-4-60	$558,563.00	$515,799.00	1954 Hospital
Passenger Elevator, conn. corridor between Ward Bldgs 10 & 20 (1749) Pacific Elev.& Equip.Co.	10-2-59	6-15-61	34,795.00	34,795.00	1954 Hospital
Ward Bldg. 10, Modernization Proj. III, Phase E, Part 2 & conn.corr. between Bldgs. 10 & 20 (1748-50) Arntz Bros.	10-2-59 - - -	98.5%	924,629.00 - - - - -	628,748.00	1954 Hospital
Alt. to Film drying & X-ray developing rooms (1904R) Bureau of Bldg. Repair	8-24-60	1-31-61	4,883.00	4,883.00	1954 Hospital
New Passenger Elevator (1914) T.B. Bldg. 60 Otis Elevator Co.	8-24-60	55%	32,438.00	11,841.00	1954 Hospital
General Construction T.B. Bldg. 60 (1840) Wm. McIntosh & Son	8-24-60	60%	644,689.00	386,813.00	1954 Hospital) General)

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
C-1 S.F. GENERAL HOSPITAL (continued)					
Bulk Oxygen Storage System (1808) Arthur W. Baum	9-14-60	2-1-61	$ 17,942.00	$ 17,942.00	1954 Hospital
General Construction of Gunite Shear Walls, 2nd & 3rd floors Isolation Building (1932) Wm. McIntosh & Son	4-28-61	50%	11,775.00	5,888.00	General Fund
Gen. construction for struct.reinforcing on 5th floors of Bldgs. 20 & 30 (1965) Wm. McIntosh & Son	6-14-61	0	24,807.00	0	General Fund
Total Awarded and Expended During Fiscal Year			$736,534.00	$1,606,709.00	

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
C-2 LAGUNA HONDA HOME					
Alterations to Ward Bldg. L and related work (1825) Arntz Const. Co.	4-22-60	5-29-61	$355,653.00	$348,540.00	General
Terrazzo floor repair (1907) Travertite Co. Inc.	6-17-60	10-14-60	1,995.00	1,995.00	General
Alterations to ambulatory women's Dispensary (1891) H. E. Rahlmann Co.	6-17-60	10-14-60	2,973.00	2,973.00	General
Misc. repairs to Passenger Elevators (1802) Pacific Elev.& Equip.Co.	6-17-60	3-20-61	24,700.00	24,700.00	General
	- - -		- - - -		
Ward Bldgs. M & O and related work (1961) Arntz Const. Co.	6-16-61	0	229,907.00	0	Def.Maint.
Total Awarded and Expended during Fiscal Year			$229,907.00	$378,208.00	

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
D M.H. DE YOUNG MEMORIAL MUSEUM					
Ceiling renewal - Kress wing (1934) The Brookman Co.Inc.	10-28-60	3-3-61	$6,176.00	$6,176.00	General
Resilient Flooring and related work - (1940) Library room L. J. Hanson	11-9-60 - - -	1-24-61	440.00 - - - -	440.00	General
Suspended Ceiling East Wing (1979) ARthur W. Baum	4-12-61	6-7-61	1,765.00	1,765.00	General
Total Awarded and Expended During Fiscal Year			$1,765.00	$8,381.00	

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
E YOUTH GUIDANCE CENTER					
Maximum security cottage (1851-R) John A. Nelson, Inc.	12-28-60 - - -	48%	$182,500.00 - - - -	$87,600.00	General
Stainless steel work (1991) Bureau of Bldg. Repair	6-26-61	0	3,053.00	0	General
Total Awarded and Expended During Fiscal Year			$ 3,053.00	$87,600.00	

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
F CIVIC CENTER					
City Hall - 2nd floor Alt. to Supervisors' and Clerk's Offices (1820) Anton Petersen & Sons	12-29-59	8-15-60	$42,910.00	$ 3,433.00	General
Civic Center Plaza (1859R) Phase 2 Watkin & Sibbald	5-13-60	3-1-61	663,387.00	549,377.00	1954 Ex.Hall Bond & Spec. Road Improve.
New Acoustical ceilings Phase I- Superior Ct. rooms (1915) Western Asbestos Co.	7-22-60	9-16-60	5,855.00	5,855.00	General
Fabric wall covering (1900AR) S.F. Museum of Art Bureau of Bldg. Repair	7-27-60	10-15-60	1,253.00	1,253.00	General
New acoustical ceilings Phase II (1927) Superior Ct. rooms Western Asbestos Co.	8-24-60	11-2-60	675.00	675.00	General
Civic Center Plaza (1981) Coating of glass globes Coopman Elec. Co.	4-7-61	6-7-61	844.00	844.00	1954 Ex.Hall Bond
Civic Center Plaza (1993) pre-cast conc.interceptor drain panels Bureau of Bldg. Repair	5-26-61	0	3,300.00	0	1954 Ex.Hall Bond
Total Awarded and Expended During Fiscal Year			$11,927.00	$561,437.00	

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
G HALL OF JUSTICE					
General Construction (1620) Phase II-Hall of Justice M & K Corporation	11-19-58	95%	$13,508,500.00	$12,833,075.00	1956 H.Justice
Elevators-Hall of Justice (1620A) Otis Elevator Co.	11-19-58	97%	465,888.00	335,439.00	1956 H.Justice
Topsoil, finish grading & planting-Hall of Justice (1620B) Rudolph Watson	11-19-58	30%	30,500.00	9,150.00	1956 H.Justice
	- - -		- - - -		
Service Station-Hall of Justice- General construction (1864) Balliet Bros.	8-17-60	6-1-61	164,119.00	164,119.00	1956 H.Justice
Total Awarded and Expended During Fiscal Year			$164,119.00	$13,341,783.00	

CURRENT CONTRACT DATA 1960-1961

Description & Contractor	Awarded	Completed Date or %	Contract Amount	Amount Expended 1960-1961	Fund
H MISCELLANEOUS					
War Memorial Opera House Stage flooring (1723) C. J. Collins Co.	1-20-60	1-20-61	$ 9,485.00	$9,485.00	General
War Memorial Opera House Steam cleaning (1868) W. L. Bipes Co.	5-4-60	1-13-60	46,857.81	42,172.00	General
Main Library (1886) Steam cleaning & pointing Arthur W. Baum	6-3-60	1-14-61	20,100.00	20,100.00	General
S.F. Museum of Art (1900) Fabric wall covering Ink Ribbon Mfg. Co.	6-15-60	10-11-60	1,394.00	1,394.00	General
Voting Machine Warehouse Office enclosure (1878) C. J. Collins Co.	6-24-60 - - -	11-25-60	19,384.00 - - - -	19,384.00	General
Steinhart Aquarium (1846) Rehabilitation Ira A. Larsen Co.	7-27-60	43%	1,227,711.00	527,916.00	1959 Rec-Park
Hassler Health Home (1929) Emergency exit ramps Robert L. Sage	9-28-60	1-5-61	3,576.00	3,576.00	General

Log Cabin Ranch School Toilet building (1944) Morlind Const. Co.	11-30-60	4-17-61	9,781.00	9,781.00	General
150 Otis Street (PWD) Window replacement & related work (1933R) H. E. Rahlmann Co.	12-7-60	5-26-61	6,980.00	6,980.00	General
Eureka Valley Library General construction (1952) Leon Carlen	12-28-60	76%	150,000.00	114,000.00	General
Public Welfare Building Window replacement & Interior alterations (1935) Erbentraut & Summers	12-28-60	98%	36,909.00	36,171.00	General
Log Cabin Ranch (1953) Service building Filo Corporation	3-10-61	45%	42,274.00	19,023.00	General
Palace of Legion of Honor Installation of Louis XVI Room (2000) Antone Petersen & Son	6-14-61	0	24,880.00	0	General
S.F. Museum of Art (2001) Fabric Wall covering Ink Ribbon Mfg. Co.	6-16-61	0	1,164.00	0	General
Total Awarded and Expended During Fiscal Year			$1,503,275.00	$809,982.00	

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Utica/Omaha, NE
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Bindery Ltd